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WIND-TUNNEL INVESTIGATION OF TURBULENT BOUNDARY LAYERS ON AXIALLY SYMMETRIC BODIES AT SUPERSONIC SPEEDS

By

DARWIN W. CLUTTER and KALLE KAUPS

Report No. LB31425

6 February 1964

PREPARED UNDER NAVY, BUREAU OF NAVAL WEAPONS, CONTRACT NOw 61-0404-T.

DOUGLAS AIRCRAFT DIVISION • LONG BEACH, CALIFORNIA

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1.0 SUMMARY

An experimental investigation was conducted to determine the characteristics of supersonic turbulent boundary layers in regions of large pressure gradients — both favorable and adverse — and with and without heat transfer. Details of the velocity, temperature, and static-pressure profiles were measured at several stations on three bodies of revolution at Mach numbers from 1.61 to 4.50. One of the bodies was equipped with an internal cooling system so that profile data could be obtained for a cooled-wall condition as well as for the adiabatic-wall condition. Profile data are presented in both graphical and tabular forms. Integrated boundary-layer thicknesses — displacement, momentum, and energy — are presented.

For each of the flow conditions investigated, the measured growth of the boundary-layer thicknesses is compared with those predicted by two approximate theories. These comparisons were greatly limited because each of the theories depends on an assumed shear-distribution relation through the boundary layer and there was no way to compare this assumed shear with the actual shear. The various theories available for predicting turbulent boundary layers are surveyed, and the reasons for choosing the two theories that were compared with the measured data are given. Agreement between the measured and predicted values is poor, particularly in regions of large changes in the pressure normal to the body surface. This is at least partly due to the fact that the theories assume no normal pressure change.

The measured velocity profiles are compared with the universal law-of-the-wall profile. Although the variation of measured data is similar to that of the universal type, the slope of the profiles is found to be affected both by pressure gradients and by heat transfer. The transformation developed by Coles, which proved successful in transforming any compressible adiabatic flat-plate velocity profile to an incompressible profile, was applied to the measured data; it does not appear to be applicable under conditions of large pressure changes in either the flow direction or in the direction normal to the flow. Attempts to modify the various theories to account for the pressure change normal to the surface were not successful.

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3.0 INDEX OF FIGURES AND TABLES

4.0 PRINCIPAL NOTATION

a	speed of sound
a_T	speed of sound based on total temperature
a^*	speed of sound based on reference temperature
A, B, C	constants in eqs. (3), (17) and (56)
b	thickness of model wall
c	specific heat of model-wall material or chord length
c_f	local skin-friction coefficient
c_p	specific heat at constant pressure
C_F	average skin-friction coefficient
C_p	pressure coefficient
C_1, C_2	constants in eq. (57)
d	ratio of total shear stress to laminar shear stress at the edge of the laminar sublayer
h	heat-transfer coefficient
H	shape parameter
k	longitudinal curvature of the body
K	constant in Prandtl's mixing-length formula
ℓ	mixing length
M	Mach number
M_{calib}	calibration Mach number for equilibrium-temperature probe
M_T	Mach number parameter, eq. (59)
n	exponent of power profile in turbulent flow
N	exponent in eq. (45)
p	static pressure
p_{calib}	calibration static pressure for equilibrium-temperature probe
p_T	total pressure
p_{T_2}	measured pitot pressure
Pr	Prandtl number
q_A	net heat flux at model surface
q_L	rate of heat loss to inside of model
q_{RTW}	rate of heat radiated to tunnel wall
q_s	rate of heat stored in model
q_w	rate of heat transferred to model

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H	shape parameter
k	longitudinal curvature of the body
K	constant in Prandtl's mixing-length formula
ℓ	mixing length
M	Mach number
M_{calib}	calibration Mach number for equilibrium-temperature probe
M_τ	Mach number parameter, eq.(59)
n	exponent of power profile in turbulent flow
N	exponent in eq.(43)
P	static pressure
P_{calib}	calibration static pressure for equilibrium-temperature probe
P_T	total pressure
P_{T_2}	measured pitot pressure
Pr	Prandtl number
q_A	net heat flux at model surface
q_L	rate of heat loss to inside of model
q_{RTW}	rate of heat radiated to tunnel walls
q_s	rate of heat stored in model
q_w	rate of heat transferred to model

q_∞	dynamic pressure based on conditions in test section
r	recovery factor or radial distance from axis of revolution
R	body radius or gas constant
R_δ	Reynolds number based on boundary layer thickness
R_δ/IN	Reynolds number per inch based on boundary layer thickness
R_L	Reynolds number based on laminar sublayer thickness
R_θ	Reynolds number based on momentum thickness
s	surface distance along the body
s_o	distance to the virtual origin of the turbulent boundary layer
t	time
t_o	initial time for transient temperature measurement
T	static temperature
T_F	frame temperature
T_M	measured temperature of equilibrium-temperature probe
T_r	recovery temperature
T_{rec}	cone recovery temperature
T_s	surrounding wall temperature
T_{TW}	tunnel wall temperature
T_w	model-wall temperature
T_T	total temperature
U	velocity
U_τ	friction velocity, eq.(60)
w	specific weight of model-wall material
Y	normal distance to model surface
β_q	dimensionless heat-flux parameter, eq.(61)
γ	ratio of specific heats
δ	total boundary-layer thickness
δ_L	laminar sublayer thickness
δ^*	boundary-layer displacement thickness
ϵ	emissivity
η	variable in Stewartson-Illingworth transformation
θ	boundary-layer momentum thickness
θ_E	boundary-layer energy thickness
μ	viscosity
ν	kinematic viscosity

ρ	density
σ	Stefan-Boltzmann constant
τ	shear stress
φ	angle between normal to the surface Y and the radius r
ω	exponent in viscosity-temperature relationship

SUBSCRIPTS

∞	evaluated in test section
δ	evaluated at the edge of boundary layer
c	evaluated at the edge of boundary layer on the equilibrium-temperature cone
i	quantities from inviscid solution
ℓ	laminar
L	evaluated at the edge of laminar sublayer
t	turbulent
w	conditions at model wall
1	evaluated at the initial point of calculations
2	evaluated at the final point of calculations

SUPERSCRIPTS

$*$	evaluated at reference conditions

Primes denote transformed quantities

5.0 INTRODUCTION

Several years ago a survey was made of the various methods of predicting turbulent heat transfer and skin friction on high-speed vehicles, a subject that has become increasingly important in the last decade. Because turbulent-flow theory is an empirical science, all of these theories were based on experimental data, which were available only for speeds less than Mach 3 and for only a few shapes of bodies. The predictions of the various methods agreed at low Mach numbers, but there was great disagreement at high supersonic speeds. For example, in one flow at Mach 5, two of the heat-transfer predictions differed by 100 percent.

It was impossible to determine which of the methods gave the best predictions because of the scarcity of experimental data. These data were particularly scarce under conditions of variable pressure and variable wall temperatures. The most complete set of available data for such conditions was that obtained by McLafferty and Barber (reference 1). The only difficulty with these was that the boundary layers were so thin that little knowledge of the velocities and temperatures near the surface was obtained. The only data available that gave information on the boundary-layer profile near the wall were those of Hill (reference 2). But these were taken under conditions of very weak pressure gradients and zero heat transfer. After the investigation described here was started, two other sets of data containing details of velocity profiles in high-speed turbulent boundary layers were published (references 3 and 4).

The survey demonstrated that the greatest need was for comprehensive data on turbulent boundary layers for a variety of flow conditions. Perhaps the primary reason for this extreme dearth of data was the high cost of testing. The situation was similar to those that had existed earlier in particular phases of the state of the art of predicting turbulent-boundary-layer flow. In the early 1950's, there existed a variety of methods for calculating the growth of turbulent boundary layers in incompressible flow that could give widely different predictions in particular cases. At that time, Douglas Aircraft initiated a low-speed wind-tunnel investigation to

obtain comprehensive boundary-layer data to determine the best of the various methods. These low-speed tests, described in references 5 and 6, established the fact that the "law of the wall" remains valid in flows with pressure gradients. The test data were also used to establish that the Truckenbrodt method gives quite accurate predictions of boundary-layer growth.

A similar situation existed in the prediction of turbulent skin friction for the simple case of flat-plate compressible flow. In 1954, Chapman and Kester surveyed fifteen various theories for predicting such skin-friction coefficients and showed that they could disagree by as much as 300 percent at Mach 5. Since that time a large number of measurements have been made and have established the best of these methods. In a recent article (reference 7) Spalding and Chi compared 20 theories with measurements from 22 sources and found that the method of Van Driest (reference 8) gives the smallest root-mean-square error, 11 percent for the relatively simple case of compressible flat-plate flow.

The tests described here were designed to supply data on boundary-layer growth and skin friction for compressible turbulent flow in the presence of pressure gradient and variable wall temperatures. The objectives of the investigation were (1) to obtain accurate comprehensive data on the characteristics of turbulent boundary layers for a variety of supersonic-flow conditions; (2) to determine what correlation there is between these data and existing theories; and (3) to formulate, if possible, new theories to better describe the measured boundary-layer characteristics.

To satisfy the first objective, boundary-layer data were obtained on three bodies of revolution — a concave center section, a convex center section, and a relatively blunt center section — at Mach numbers from 1.6 to 4.5 (see figure 1). One of the bodies was equipped with a cooling system so that data could be obtained under conditions of high heat transfer as well as under adiabatic-wall conditions. Measurements included surface static pressure, surface temperature and heat transfer, and details of the profiles of temperature, velocity, and static pressure at about six

stations for each body and Mach number. Part of the planned program was a considerable amount of direct measurement of skin friction by means of a ''floating element'' balance. The first measurements were not very successful, because of tunnel vibrations and heating. Unfortunately, subsequent attempts were prevented by the cessation of operation of the wind-tunnel facilities in June 1962, before the instrumentation could be modified.

The various theories for predicting turbulent boundary-layer growth under the test conditions were studied. The theories that appeared most appropriate for comparing with the measured data were that of Culick and Hill (reference 9) and that of Persh (reference 10). But even for these the correlation was only fair under conditions of weak axial pressure gradient, and no consistent correlation could be obtained in the presence of large axial-pressure gradients and normal-pressure gradients. All of the theories are based on an assumed shear distribution through the boundary layer. In attempts to modify the assumed shear distribution, the measured normal-pressure gradient was taken into account, but no consistent correlation could be found.

6.0 WIND TUNNEL AND MODELS

The tests were conducted in the supersonic wind tunnel at the U. S. Naval Missile Center, Point Mugu, Calif. Except for the circuit that gives Mach number greater than 3.5, the wind-tunnel facilities are described in detail in reference 11. The tunnel could be operated continuously. Its test section was about 22 inches square and 40 inches long. Total temperature varied from 100°F to 160°F. Measurements were made at Mach numbers from 1.6 to 4.5 and at unit Reynolds numbers from 4.4×10^6 to 9×10^6 per foot.

Models that were used in the tests, shown in figures 1 to 4, are bodies of revolution. A complete model consists of a nose section of 2.75-inch diameter, a center section that increases in diameter from 2.75 inches to 5.5 inches, a section of constant 5.5-inch diameter, and an aft section. The nose section consists of stainless steel tubes of various lengths tipped by a nose piece designed to minimize the strength of the nose shock. The nose piece is shown in figure 1, and its coordinates are given in Table I. A long nose section was used so that boundary layers would become thick enough to make possible the accurate measurements of details of the velocity and temperature in the boundary layer. The nose was of variable length so as to allow some control of the location where the nose shock impinged on the center section, where the measurements were being made. At Mach number 2.5 or less, the nose section extended forward of the nozzle throat, but because of the small throat diameters at higher Mach numbers, shorter nose lengths had to be used at Mach numbers greater than 2.5. Lengths of nose sections used are given below:

Mach Number	Length of Nose
1.61	83 in.
2.50	83 in.
3.30	55 in.
4.50	43 in.

The centerbodies of the model — the section of increasing diameter — have three different shapes (see figures 1 and 3). The shapes were chosen to represent

TABLE I

COORDINATES OF NOSE PIECE

Distance (in.)	Radius (in.)
0	0.000
1	0.190
2	0.367
3	0.528
4	0.677
5	0.809
6	0.928
8	1.123
10	1.263
12	1.346
14	1.375

TABLE II

COORDINATES OF CENTER SECTIONS

Convex		Concave		Blunt	
Station (in.)	Radius (in.)	Station (in.)	Radius (in.)	Station (in.)	Radius (in.)
0.0	1.3750	0.0	1.3750	0.0	1.3750
1.0	1.5969	1.0	1.3846	1.0	2.3777
2.0	1.7989	2.0	1.4129	2.0	2.7230
3.0	1.9810	3.0	1.4600	2.3816	2.7500
4.0	2.1432	4.0	1.5261		2.7500
5.0	2.2860	5.0	1.6113		2.7500
6.0	2.4100	6.0	1.7160		2.7500
7.0	2.5137	7.0	1.8390		2.7500
8.0	2.5989	8.0	1.9818		2.7500
9.0	2.6650	9.0	2.1440		2.7500
10.0	2.7121	10.0	2.3261		2.7500
11.0	2.7404	11.0	2.5281		2.7500
12.0	2.7500	12.0	2.7500		2.7500
22.0	Constant	22.0	Constant	22.0	Constant

Note: Coordinates are theoretical, actual model coordinates were within a 0.001 inch of these.

the surface curvature of supersonic vehicles as well as to produce the range of pressure gradients that are most often encountered by vehicles traveling at the test speeds. The shapes include a convex section, a concave section, and a relatively blunt section. Their coordinates are given in Table II. All are sections of circular arcs. The station distances given in the table are distances measured from the point where the nose section of constant radius and the circular-arc sections join. These center sections were made of electroformed nickel 0.10 inch thick. This type of fabrication was used because a thin wall of uniform thickness was required for the technique that was used to measure heat transfer (described below under ''INSTRUMENTATION''). Static-pressure orifices, 0.0485 inches in diameter, were spaced one inch apart along the surface and thermocouples (Copper-Constantan) two inches apart (figure 1). The method of mounting the models in the wind tunnel is indicated in figures 4 and 5.

The convex centerbody was equipped with a cooling system, so that measurements could be made under cold-wall conditions as well as adiabatic-wall conditions. The cooling system (shown in figure 6(a)) that was first tried, failed to give uniform cooling. It consisted of a 3/8-inch-diameter tube that was coiled as shown. Holes of 0.064-inch-diameter were drilled in the coil one-half inch apart. When liquid nitrogen was forced into the tubing, the nitrogen sprayed against the wall of the model, cooling the surface. In a preliminary laboratory set-up, the nitrogen appeared to spray uniformly on the inner wall of the model, and although such a system had previously been successful in similar tests, the system failed to give symmetrical and repeatable cooling under flow conditions in the wind tunnel.

For this reason it was replaced by the second cooling system sketched in figure 6(b). Liquid nitrogen was channeled against the inside wall by the fiberglass insert shown in the figure. Although this system did not give uniform cooling along the surface in the flow direction, it did give uniformly axisymmetric cooling and was used in all the measurements described below for the cold-wall cases. The maximum flow of liquid nitrogen was about a half gallon per minute and cooled the surface to about -300°F. After vaporizing, the nitrogen was exhausted through the aft end of the model into the tunnel.

7.0 INSTRUMENTATION

Total-pressure, static-pressure, and total-temperature distributions through the boundary layer were measured by a rake that traversed the boundary layer by remote control. The rake and traversing mechanism are shown in figures 7, 8, and 9. The entire mechanism consisted of the rake, position-indication system, and the motor that traversed the rake. The rake contained six total-pressure probes and six temperature probes. The probe tips were always made to move normal to the surface at the measuring station. This was accomplished by mounting the mechanism on a wedge of the proper angle. Examples are shown in figures 10 and 11. The latter figure is a Schlieren photograph taken at Mach 3.3 when profiles were being measured at station 10 on the convex body. Either a total-head or a static-pressure probe could be mounted on the top of the traversing mechanism to measure pressures outside the boundary layer. The motor was actuated and the number of motor revolutions were counted remotely outside the tunnel. The counter was quite sensitive; it missed at most one revolution when the rake traversed its maximum distance — 2 inches. One revolution moved the rake 0.00004 inch. Position of the rake could also be located to 0.0001 inch by observing the dials shown on the side of the mechanism in figures 7 and 8. The zero position of the rake, that is, when the bottom total-head probe just touched the model surface, was determined electrically.

The total-pressure probes on the rake were made by flattening the end of a piece of 0.040-inch-diameter stainless steel tubing that had a wall thickness of 0.003 inch until the opening in the end was 0.002 by about 0.012 inch. With the probe against the surface of the model, the center of the probe was 0.004 inch from the surface. The vertical spacing between the total-pressure probes (and also the temperature probes) was 0.20 inch. Thus, since the maximum boundary-layer thickness measured was about one inch, the entire profile could be surveyed by moving the rake only 0.20 inch.

The temperature probes were similar to the equilibrium-temperature probes developed by Danberg at the Naval Ordnance Laboratory (reference 12) The tip of the probe was a metal cone with a 10° included angle and a base diameter of 0.040 inch. A thermocouple was imbedded in the base of each cone. The cones

were mounted on wood and ceramic stings in order to minimize the heat transfer by conduction between rake support and the cones. The cones were made of gold to obtain low emissivity and, consequently, small radiation. A drawing of the probe is shown in figure 12. Ideally, the thermocouple measured the laminar recovery temperature of the cone. This recovery temperature can be related to the local temperature of the flow through the known relations for conical flow and laminar recovery factor. A thermocouple was also imbedded in the frame of the rake.

Static-pressure probes could also be mounted on the side of the rake, one is shown in figure 9, and traversed through the boundary layer. Separate traverses were required to measure the static pressure and to measure both the total pressure and temperature in the boundary layer, because of interference of the static-pressure probe with both the total-pressure and temperature probes.

At Mach numbers of 1.6 to 3.3 the pressures, both static and total, were measured on the Fischer-Porter pressure transducer read-out system at the wind-tunnel facilities (see reference 11) and were checked on conventional manometers. The error in the pressure read-out system is believed to be $\pm$ 0.005 in the pressure coefficient, defined as $C_p = (P - P_\infty)/q_\infty$. At the highest Mach number tested, the low static pressure in the tunnel necessitated the use of a mercury or unity-oil manometer for recording the pressure. The accuracy was poorer here, being estimated as $\pm$ 0.009 in C_p. Lag time, that is, the time required for the indicated pressure on the measuring device to come within one percent of the true pressure, was quite large for the total-pressure probes, because of the small orifices in the probes. The time varied from three minutes to five minutes, increasing with Mach number.

Outputs of the thermocouples in the temperature probes were read out on the SADIC system of the wind-tunnel facilities. This system takes the analog signal from the thermocouples and digitizes and records it for further data reduction by the computer at the facility. The system, in combination with the Copper-Constantan thermocouples, is believed to read temperatures with an error less than $\pm$ 2.5°F at temperatures greater than -30°F. As the temperature is lowered below this point, accuracy lessens; and at -180°F, the lowest temperature recorded in the tests, the error is as great as $\pm$ 8°F. Heat transfer was measured by the

transient technique, which is described fully in DATA REDUCTION. Briefly, heat transfer can be related to time-rate-of-change-of-wall-temperature. First a steady wall temperature is established by regulating the flow of liquid nitrogen to the model. When the flow of liquid nitrogen is suddenly stopped, the time rate of change in temperature can be related to the heat transfer for the steady temperature condition. What is important here is that the technique requires the recording of the variation of the model-wall temperature with time. For this reason the wall temperatures were recorded on an oscillograph (Electrodynamics Type 5114-P4). Temperatures could be determined at time intervals as small as 0.01 second. The error within which temperatures could be read from the oscillograph records was ± 12°F.

A floating-element balance was designed to measure skin friction directly. The design is similar to that used by previous investigators, for example, Coles in reference 13).The balance is shown in figure 13. The objective was to measure the skin friction on a 5/8-inch-diameter button. The button was mounted flush with the top surface at station 14 on the blunt centerbody. All major components of the balance were made of nickel (the model itself was made of nickel) to prevent distortions due to differential expansion. Complete longitudinal and lateral symmetry of structure was also maintained, also to minimize effects of thermal expansion.

The button, on which the drag force was measured, is the top of a swinging hollow pedestal. The pedestal was supported from the bottom by two flexure links having one flexure (pivot) at the bottom and one at the top. The flexures were mounted in two pairs, lying in two parallel vertical planes. Motion of the floating element was in the horizontal plane only. The action of the element under tangential forces moved two cores, one through a variable linear differential transformer and one through a solenoid (see figure 13).

The differential transformer, a Schaevitz 020 MS-Lt, indicated position of the pedestal within 0.000002 inch. It was used with a Schaevitz model PC-1 gage amplifier and display. This system was used to indicate zero, or null, position of the button and pedestal.

The solenoid was of dual construction with two rails, one forward and one aft. These coils, with their core, produced a force for initially centering the button and also for maintaining the button in null (center) position during a force measurement. The latter was accomplished by varying the solenoid voltage required to center the button. This voltage was measured and calibrated with known forces in the laboratory before the tests. The voltage to the solenoid was read with a digital voltmeter.

Motion of the element was damped by surrounding most of the floating structure with 12,500-centistoke Silicone fluid.

8.0 DATA REDUCTION

This section covers the methods and equations used in data reduction. Most of the numerical computations were programmed on the IBM 7090 computer with faired experimental data and external flow conditions as inputs. Figure 14 shows a sketch of the geometry and quantities used in data reduction. The sequence of steps for data reduction was as follows: The Mach number was calculated from the measured total and static pressures; the static temperature from the Mach number and the measured equilibrium temperature; the velocity and the density from the static temperature. Then the integrals for displacement thickness, momentum thickness, and energy thickness were evaluated, with the normal pressure gradients taken into account.

In order to eliminate the small differences between individual total-head-probe measurements in regions of overlap and to simplify data reduction, the measured data were faired smooth. A typical set of recorded data points, together with the faired curve, is shown in figure 15. The repeatability, estimated from overlapping probe measurements, is believed to be within one percent.

According to reference 14, the mutual interference between probes could be neglected, since the distance between probes was over twenty times the probe-tip height. Also, the viscous effects on the total-head reading could be neglected, because the Reynolds number based on probe height was larger than 200, with the exception of those measurements at Mach 4.50 where at the lowest probe position the effects of boundary-layer separation were predominant (see reference 15). A study showed that the corrections for streamline displacement due to wall interference were small for a flat probe in subsonic flow. Since subsonic flow existed only in the lowest probe position, i.e., with the probe in contact with the surface, corrections were considered superfluous, due to the strong effects of local separation ahead of the probe.

The accurate measurement of static-pressure variation in the boundary layer presented some difficulties because in the cases of convex and concave center sections there was, besides the longitudinal pressure gradient, also a strong gradient in the direction normal to the surface. Furthermore, the fact that the flow field was curved introduced additional complications into the static-

pressure measurements. However, it was observed that the measured static-pressure distribution in the outer regions of the boundary layer had a shape similar to that calculated by the method of characteristics for inviscid flow. Therefore it was assumed that the shape of the measured static-pressure distribution in the boundary layer was reasonably accurate. But also it was known that the static-pressure probe would tend to sense a higher pressure than the true local static pressure because of boundary-layer growth on the probe itself. Since the measured pressure at the wall P_w was known to be more accurate than those measured in the boundary layer, the curve of the latter was shifted in such a way that its wall intercept coincided with the wall pressure. Figure 16 shows a representative plot of the measured static pressure in the boundary layer, the inviscid solution, and the shifted static pressure curve. The shift shown is much higher than the average for the measurements. According to boundary-layer theory, the condition $\partial P/\partial Y = 0$ has to be satisfied at the wall. Michel, in reference 3, found that $\partial P/\partial Y = 0$ was valid not only at the wall itself but approximately up to the sonic point in the boundary layer and that above this point the shape of the pressure distribution was nearly that predicted by inviscid theory. If these findings are applied to the example shown, where the sonic point is approximately at $Y = 0.005$ inch, it is found that the omission of the $\partial P/\partial Y = 0$ criterion introduces a maximum error of less than one-half of one percent in static pressure. This error is relatively small, as compared to the possible error introduced by the uncertainty in the shifted static-pressure distribution in the boundary layer, which in some cases may be as high as ten percent.

For $P/P_{T_2} \leq 0.5283$ (i.e., $M \geq 1$) M was calculated from Rayleigh's pitot formula:

$$\frac{P_{T_2}}{P} = \left[\frac{(\gamma + 1) M^2}{2}\right]^{\frac{\gamma}{\gamma - 1}} \left[\frac{\gamma + 1}{2\gamma M^2 - (\gamma - 1)}\right]^{\frac{1}{\gamma - 1}} \tag{1}$$

For $P/P_{T_2} > 0.5283$, the Mach number was subsonic and was determined from the relation:

$$\frac{P}{P_{T_2}} = \left[1 + \frac{\gamma - 1}{2} M^2\right]^{-\frac{\gamma}{\gamma - 1}} \tag{2}$$

In both cases M was determined by means of a method of successive approximations.

Temperature profiles were determined from the equilibrium-temperature probe measurements according to the procedure outlined in reference 12 . Using eq.(3) from reference 12, we have:

$$T_{rec} = T_M + \sqrt{\frac{M\,P}{M_{calib}\,P_{calib}}}\left[A(T_F - T_M) + B(T_M{}^4 - T_s{}^4)\right] \qquad (3)$$

where

T_{rec} = cone recovery temperature

T_M = measured cone tmperature

T_F = frame temperature

T_s = surrounding wall temperature

and A and B are calibration constants to be determined at calibration Mach number, M_{calib}, and calibration pressure, P_{calib}. The contribution of the last term in the square brackets, representing the radiation losses to the surrounding walls, was neglected because its magnitude was less than the scatter of the data. The constant A was determined by recording T_M outside of the boundary layer and requiring that total temperature calculated from T_M match the tunnel total temperature, which is known. Despite similar construction for all six probes, there were discrepancies in measured temperatures at overlapping Y-values due to different heat-transfer characteristics between the probe tip and the frame. Since only the upper probes could be calibrated outside the boundary layer, the measurements of the lower probes were shifted in such a way that their temperatures matched those of the probe immediately above at overlapping Y values. Figure 17 shows plots of both the measured and the shifted equilibrium-temperature probe data. It is estimated that the accuracy of the faired data is within $\pm$ 2 percent. With the calculated value of T_{rec} from (3), the temperature outside the boundary layer on the cone T_c was determined from

$$T_c = \frac{T_{rec}}{1 + r\,\frac{\gamma - 1}{2}\,M_c{}^2} \qquad (4)$$

where $r = 0.826$ is the laminar recovery factor, and M_c is the cone Mach number. The value of M_c can be determined as a function of M by means of conventional cone tables. A least-square fit to such tables for $M \geq 1$ gives

$$M_c = -0.00389737 + 1.0157459\,M - 0.01270516\,M^2 - 0.00006234\,M^3 \tag{5}$$

If $M < 1$, then it was assumed that

$$M_c = M \tag{5a}$$

The total temperature in the boundary layer was calculated from

$$T_T = T_c\left[1 + \frac{\gamma - 1}{2} M_c^{\,2}\right] \tag{6}$$

and the static temperature from

$$T = T_T\left[1 + \frac{\gamma - 1}{2} M^2\right]^{-1} \tag{7}$$

For two reasons, the minimum height above the surface at which temperatures could be measured was considerably greater than that at which pressures could be measured. First the diameter of the temperature probes was 0.040 inch, as compared to a tip thickness of 0.008 inch for the total-head probes. Also the temperature probes were mounted to one side — 0.20 inch — of the pressure probes, which moved in the same plane as the traversing mechanism (see figure 7). For the latter reason the distance between the model surface and the lowest probe was greater for the temperature probes than for the pressure probes. This difference in distance increased as the local longitudinal curvature increased. In this region of missing temperatures — or area of ''temperature blackout'' — temperature values necessary for the data reduction were obtained by fitting a fourth-order polynomial in Y to the surface temperature and the lowest points of the measured temperature traverse.

Finally, the local values of velocity and density in the boundary layer were determined from

$$U = \sqrt{\gamma R T}\; M \tag{8}$$

and

$$\rho = \frac{P}{R\,T} \tag{9}$$

If the effect of the normal gradients in velocity and density in the inviscid solution are taken into account, the expressions for displacement thickness, momentum thickness, and the energy thickness take the form

$$\rho_\delta \, U_\delta \, \delta^* = \int_0^\delta (\rho_i \, U_i - \rho \, U) \, dY \tag{10}$$

$$\rho_\delta \, U_\delta^2 \, \theta = \int_0^\delta \rho \, U \, (U_i - U) \, dY \tag{11}$$

$$\rho_\delta \, U_\delta^2 \, \theta_E = \int_0^\delta \rho \, U \, (U_i^2 - U^2) dY \tag{12}$$

where the subscript i refers to the inviscid solution. The above definitions for the integrated quantities are strictly true for only two-dimensional flow with normal pressure gradient. For bodies of revolution a term involving transverse curvature should be added to each of these equations for a proper definition of each of the three boundary-layer thicknesses. If the boundary layer is thin with respect to the body radius, these terms are negligible. Even though this condition does not hold for all of the measured profiles, the transverse curvature term was neglected, for the purpose of facilitating comparison with existing theories, which also neglect the transverse-curvature terms. The inviscid values were obtained from a method-of-characteristics program. Inviscid solutions for only the convex and concave center sections were attempted, because the shock wave ahead of the blunt center section was detached and complicated in shape (see figure 25), and thus it was impossible to specify the flow there. Since the measured static-pressure variation normal to the blunt body was small and the body was of constant radius at the measuring station, it was concluded that setting U_i equal to U_δ and ρ_i equal to ρ_δ under the integral signs was justified.

In the definitions of the various boundary-layer thicknesses — equations (10), (11), and (12) — the measured values at the edge of the boundary layer must of course equal their corresponding inviscid values, that is, at $Y = \delta$, $U_i = U_\delta$

and $\rho_i U_i = \rho_\delta U_\delta$. Since the inviscid velocity profiles almost universally had a linear variation with Y, a convenient criterion for determining the boundary-layer thickness δ was to select the height at which the measured profiles deviated from a linear variation with Y. Comparison of the measured profiles at the edge of the boundary layer with the inviscid solution showed some disagreement. Such disagreement could be expected because of displacement effects on the pressure distribution along the body. For the purpose of integration, the curves for U_i and $\rho_i U_i$ were shifted to match the measured curves at the edge of the boundary layer. Figure 18 shows the nondimensional inviscid pressure distributions and velocity profiles that were used in the data reduction.

For those measurements when the model was cooled, heat transfer was measured by the transient technique, which is described in detail in reference 16. The local heat-transfer coefficient was calculated from

$$h_w = \frac{q_A}{(T_r - T_w)} \tag{13}$$

where

$$T_r = T_\delta\left(1 + r\,\frac{\gamma - 1}{2}\,M_\delta^2\right) \tag{14}$$

Here r is the turbulent recovery factor and q_A, the net heat flux at the model surface, is

$$q_A = q_s + q_{RTW} + q_L \tag{15}$$

The terms on the righthand side of equation (15) represent the rate of heat stored in the model, the rate of heat radiated to the tunnel walls, and the rate of heat loss due both to radiation and conduction inside the model and to conduction in the model skin, respectively. The rate of heat stored in the model is

$$q_s = wbc\left(\frac{dT_w}{dt}\right)_{t = t_o} \tag{16}$$

where

t = time

w = specific weight of wall material

b = skin thickness of wall

c = specific heat of wall material

The quantity $(dT_w/dt)_{t = t_o}$ is the rate of temperature rise at the model wall determined from the transient tests (see INSTRUMENTAION). The variation of wall temperature T_w is assumed to be parabolic with time:

$$T_w = A + B(t - t_o) + C(t - t_o)^2 \tag{17}$$

The coefficients A, B, C were determined by a least-square fit to the measured values of T_w versus time. The initial time, t_o, is the time when the wall temperature begins to rise from its steady value, because internal cooling has been stopped. Differentiating and evaluating eq.(17) at $t = t_o$ we have:

$$\left(\frac{dT_w}{dt}\right)_{t = t_o} = B \tag{18}$$

The ratio of heat radiated to the tunnel wall is calculated by

$$q_{RTW} = \sigma \epsilon (T_w^4 - T_{TW}^4) \tag{19}$$

where σ is the Stefan-Boltzmann constant, ϵ the emissivity, and T_{TW} the temperature of the tunnel wall. Analysis shows that the rate of heat loss to the interior of the model is small and it has been neglected in the heat-transfer calculation.

9.0 EXPERIMENTAL RESULTS

Conditions for which profile data were measured are summarized in Table III. Values of the measured displacement, momentum, and energy thicknesses are also given. Profiles of static temperature, Mach number, velocity, static pressure, and mass flow are presented in figures 19, 20, 21, and 22 for the blunt center section, concave center section, and convex center section all at a nearly adiabatic wall condition, and for the convex center section with a cold wall, respectively. These profiles are also presented in Tables IV, V, VI, and VII. Static pressures measured on the body surfaces are given in figure 23. The figure also shows the static pressure measured at the edge of the boundary layer.

For the blunt center section at Mach 1.61, profiles were measured at only two stations — 4 and 6 — (see figures 19(a) and (b)), because of the shocks that formed on the body. The flow separated at the juncture of the nose and blunt section, and caused a shock to form about two inches in front of the juncture. This shock was reflected from the tunnel wall and impinged on the model near station 9. The shock pattern can be seen in figure 24, which is a Schlieren photograph taken when profiles were being measured at station 6; the shock or disturbance that appears to be hitting the model near station 3 is actually the shock impinging on the tunnel window.

Profiles taken at Mach numbers 2.58, 3.3, and 4.5 are shown in figure 19 (c) to (n). Again the stations at which profiles could be measured were limited by the shock pattern of the flow. Schlieren photographs of the Mach numbers 3.3 and 4.5 flows are shown in figures 25 and 26, respectively. All of the profiles measured on the blunt center section were at stations where the model had no longitudinal curvature. For this reason there was little change in static pressure across the boundary layer except at Mach 4.5, where the large change in static pressure due to the shock at the nose-body juncture does affect the static pressure at the outer edge of the boundary layer at stations 10 to 14.

Profiles measured on the concave center section at Mach 1.61 are shown in figures 20 (a) to (e). A small change in static pressure is observed across the boundary layer, as inviscid-flow theory predicts. A Schlieren photograph of the flow is shown in figure 27.

Profiles for the Mach 3.3 flow are shown in figures 20 (f) to (j). Here the change in static pressure across the boundary layer is quite large; for example, at station 2 the pressure increases by 34 percent as the probe is moved from the outer edge of the viscous layer to the wall. This is a larger change than inviscid theory predicts. The change in static pressure, that is, $\partial P/\partial Y$, decreases in the downstream direction. This decrease could have been predicted, since the displacement thickness decreases and thus the effective body curvature is decreased in the downstream direction. A Schlieren photograph of the Mach 3.3 flow is shown in figure 28.

The static-pressure variation across the boundary layer for the Mach 4.5 flow is very similar to that for Mach 3.3, as can be seen in figures 20 (k) to (o). A Schlieren photograph of the flow is shown in figure 29.

Profiles taken at Mach 1.61 on the convex center section with no cooling are shown in figure 21. The Mach 1.61 data are shown in figures 21 (a) to (g). A small change in static pressure across the boundary layer was observed at station 6, decreasing in the downstream direction. The pressure was less at the wall than at the outer edge of the boundary layer, as inviscid theory predicts. A Schlieren photograph of the flow is shown in figure 30. The shock formed at the juncture of the nose and convex surface was reflected from the tunnel wall and impinged on the model surface at about station 15; the disturbance that appears to be impinging on the model surface at station 6.6 is actually the shock impinging against the tunnel window through which the Schlieren picture was taken. The complex shock patterns that are formed about the rake total-pressure probes and temperature probes can be seen in figure 31. Profiles are being measured at station 8 in the figure.

Profiles at Mach 2.58 are shown in figures 21 (h) to (m). In the region of longitudinal curvature, that is, from station 6 to station 12, the change in static pressure across the boundary layer increases in the downstream direction. The magnitude of the change is approximately that predicted by inviscid theory at station 6. The increase in the change is caused by the increasing displacement thickness, which adds to the effective longitudinal curvature of the body. In the region where the model radius is constant (aft of station 12), the change in static pressure decreases in the downstream direction. A Schlieren photograph of the

Mach 2.58 flow is shown in figure 32. The rake is mounted to take measurements at station 14.

Profiles at Mach numbers 3.3 and 4.5 are shown in figures 21 (n) to (r) and figures 21 (s) to (v), respectively. The change in static pressure across the boundary layer is similar to that discussed for the Mach 2.58 flow. Schlieren photographs of the flows are shown in figures 33 and 34. In figure 33 static-pressure probes have been attached to the total-pressure probes to obtain the pressure profile at station 12 for the Mach 3.30 flow. Of course, the total-pressure profile had to be measured in a separate survey, because of interference of the static-pressure probes with the flow about the total-head tubes. In figure 34, a static-pressure rake is mounted in such a way as to obtain the pressure profile at station 14 in the Mach 4.5 flow. As can be seen in the figure, the boundary layer on each static-pressure probe separated ahead of the strut that supported the probes, and shocks were formed that originated at distances from 5 to 10 probe diameters downstream of the static-pressure orifice. Undoubtedly, this region of separated flow and the shock produced a disturbance upstream in the boundary layer and caused the static-pressure probe to sense a higher pressure than the true local static pressure. Rakes that had a greater distance between the static-pressure orifice and supporting strut were built, but they failed structurally under the starting loads of the tunnel. These erroneous static pressures were discussed in the section on data reduction. The magnitude of the error was serious only at Mach 4.5, because of the much lower unit Reynolds number at this speed.

Profiles measured on the convex center section with internal cooling are shown in figure 22 (a) to (n) for Mach numbers 1.61, 2.58, 3.3, and 4.5. The wall temperatures measured with cooling are shown in figures 35 (a) to (o).

Comparison of the profiles of figure 22 with those with no cooling (figure 21) shows that cooling has a minor effect on the shape of the velocity profiles and that there is essentially no change in static pressure with cooling. Also the temperature through the boundary layer is greater than that predicted by theory for a body whose temperature is the same as the measured wall temperature. But this is to be expected, since the measured profile did not develop over a uniformly cooled surface. The nose of the model was not cooled, and cooling started

at the juncture of the nose and convex center section (station 0). As theory predicts, cooling decreased the boundary-layer total thickness and displacement thickness, but increased momentum thickness.

10.0 DISCUSSION OF THEORIES AND COMPARISON WITH EXPERIMENTAL RESULTS

The principal attacks on the problem of the turbulent boundary layer in compressible flow with pressure gradient have been made by extending the concepts developed for the flat plate in compressible flow. It has been pointed out by Walz (reference 17) that for both a rational analysis and evaluation of existing theories for the compressible turbulent boundary layer, direct measurements of skin-friction are necessary. Some authors have determined the shear stress at the wall by extending the measured velocity profiles to the wall by a straight-line segment. This type of approximation may be in gross error (reference 18), since the velocity profile in the compressible sublayer is not linear. The results of the present investigation consist of boundary-layer profiles only. The planned shear-stress measurements were not completed because of termination of the test series at a date earlier than that scheduled. In the light of the above situation, comparison of the test results with existing theories is possible only in terms of integrated quantities obtained from the boundary-layer profiles. Of the parameters available, the most logical and meaningful is the boundary-layer momentum thickness θ which is related to the skin friction.

There are two main approaches for predicting the behavior of the compressible turbulent boundary layer with pressure gradient. One of these applies a Stewartson-Illingworth type of transformation used in laminar flow. The best known methods in this classification are those of Reshotko and Tucker (reference 19), Englert (reference 20), Culick and Hill (reference 9), and Mager (reference 21). The other approach relies more on direct modification of incompressible-flow theories, based on empirical data. The methods of Walz (references 17, 22), Spence (reference 23), Persh (reference 10), and Michel (reference 24) are available. In both approaches, modified incompressible skin-friction laws are used. Ludwieg and Tillmann (reference 25) have shown that the law of the wall holds for incompressible turbulent flow with moderate pressure gradient. Scarcity of experimental data for turbulent compressible flows with pressure gradient does not justify the

indiscriminate use of this law of the wall, especially for strong pressure gradients and high Mach numbers. However, tests by Naleid and Thompson (reference 26) at the relatively low Mach number of 2 and moderate pressure gradients have confirmed the existence of the law of the wall under these conditions.

The main shortcoming of the existing theories is the assumption that the velocity profiles can be represented by a one-parameter family of curves. Clauser (reference 27) has shown conclusively that an adequate description of incompressible turbulent boundary-layer velocity profiles in flows with pressure gradient requires two-parameter representation, except for certain equilibrium flows. There is no reason to assume that the situation for the compressible case is any simpler. Of the authors who used the second approach, Walz has developed a multi-parameter representation somewhat different from that of Clauser, based on the equations of momentum, kinetic energy, and a modified Ludwieg-Tillmann skin-friction law. However, his attempts to correlate the theory for the special case of flat-plate flow with the experimental data of Matting, Chapman, Nyholm and Thomas (reference 28) produced a predicted skin-friction-coefficient variation with Reynolds number that was opposite to the measured values. It is possible that the discrepancy was caused by simplifications introduced in order to reduce the mathematical labor involved.

Invariably, boundary-layer calculations with momentum and kinetic-energy equations involve tacit assumptions about, and integration of, the velocity profiles. In compressible flow the integrated quantities include the variation of density across the boundary layer. For cases in which the approximation of constant static pressure in the boundary layer is applicable, the density variation can be replaced by static-temperature variation. Walz (reference 17) studied experimental data for such cases and arrived at the conclusion that either experimental errors were involved or that the simple Crocco temperature-velocity relationship derived from the energy equation by setting $Pr = 1$ is not applicable for flows with pressure gradient and heat transfer. If the latter possibility has to be considered, a more general expression is necessary, for example, the treatment by Van Driest (reference 8). The temperature effect on skin friction is usually ascribed

to the dissipation in the laminar sublayer. Its importance in the scaling of incompressible skin-friction coefficients to the compressible flows for the flat-plate case is seen in the successful application of the reference-temperature methods by Eckert (reference 29), Sommer and Short (reference 30), and many others. Some authors (see Liepmann (reference 31) and Kestin (reference 32)) have felt that further progress in the study of the compressible turbulent boundary layer can be made only by a more detailed investigation of the laminar sublayer. One of the more recent papers along these lines has been published by Coles (reference 33).

In the present investigation and in the correlation with existing theories, two complications, aside from the skin-friction measurements, have to be considered. In designing the test set-up, attainment of reasonably thick boundary layers for adequate measuring purposes was sought. Since the resulting ratio of boundary-layer thickness to local body radius δ/R approaches unity, the boundary-layer equations for a body of revolution have to include the terms of the order of δ, $(O(\delta))$. This leads to a complicated momentum-integral equation, for which the variation of shear stress through the boundary layer has to be known. The equation may be written as follows.

$$-\frac{\partial}{\partial s}\int_0^\delta \rho U^2 dY + \int_0^\delta \left[U_\delta \frac{\partial(\rho U)}{\partial s} + \rho_i U_i \frac{\partial U_i}{\partial s}\right] dY + \int_0^\delta \rho U(U_\delta - U)\frac{\partial r}{\partial s}\frac{dY}{r} =$$

$$= \tau_w - \int_0^\delta \frac{\tau}{r}\frac{\partial r}{\partial Y}\,dY \tag{20a}$$

$$\frac{\partial P}{\partial Y} = k\,\rho\,U^2 \tag{20b}$$

As a consequence of the fact that $\delta/R \sim O(1)$ the exact definitions for displacement, momentum, and energy thicknesses take different forms; for example, the definition of momentum thickness is expressed by

$$\rho_\delta U_\delta^2\,\theta\left(1 + \frac{\theta}{2R}\cos\varphi\right) = \int_0^\delta \left(1 + \frac{Y}{R}\cos\varphi\right)\rho\,U(U_i - U)\,dY \tag{21}$$

The difficulty with the given quadratic expression is that the momentum - integral equation cannot be readily expressed in terms of θ. Howarth (reference 34) and Hill (reference 2) used approximations that make equations of the type (20) and (21) compatible.

The existing theories for axisymmetric turbulent boundary layers are based on thin-boundary-layer assumptions: a) In the momentum-integral equation and in the definitions of the integral quantities such as momentum thickness, the normal-pressure-gradient effect is neglected, by representing the inviscid flow as a function of the surface distance only; b) the transverse-curvature term in the momentum-integral equation accounts for only first-order effects, and the definitions of the integral quantities are developed without higher-order transverse-curvature effects; i.e., they are identical to the two-dimensional thin-boundary-layer assumptions; and c) the boundary-layer profiles are independent of the normal pressure variation. As a consequence, the density variation through the boundary layer can be replaced by the Crocco-temperature-velocity relationship.

Since both the concave and the convex center sections showed strong normal-pressure gradients at the higher Mach numbers tested, it was clear that the integral quantities obtained from the measured profiles could not be calculated under the thin-boundary-layer assumptions. In order to have a basis for comparison between the predicted and the measured momentum thicknesses, the measured displacement, momentum, and energy thicknesses were based on definitions that neglect the higher-order transverse-curvature effect but include the normal-pressure variations, i.e., the assumption of a thick, two-dimensional boundary layer (see equations 10, 11, and 12). Thus the measured momentum thickness based on the normal-pressure-gradient effects on the boundary layer and inviscid profiles is compared with a predicted momentum thickness calculated without pressure variation through the boundary layer.

The magnitude of errors introduced by neglecting the transverse-curvature and normal-pressure effects can be obtained from special cases. Eckert's approximate analysis for cylinders without pressure gradients in axial flow (reference 35) shows that the transverse-curvature effect on skin friction

for the present test conditions varies from 2 to 5 percent. Michel (reference 3) calculated the effect of the negative normal-pressure gradient on the momentum-thickness growth of a two-dimensional turbulent boundary layer at $M = 2.0$. His results indicate that the omission of the normal-pressure-gradient effects will cause underestimation of the momentum-thickness growth by as much as 30 percent. In view of the many simplifications and uncertainties involved, no final choice of a best method was contemplated, even if correlation were achieved between the present experiment and existing theories. For this reason the number of methods used for correlation studies was kept at a minimum, and the question of the best method was left open. However, some remarks about the "best" method for the compressible turbulent boundary layer on a flat plate without pressure gradient seem appropriate. Peterson (reference 36) compared seven theories for predicting the skin-friction coefficient with data from 21 sources and found that the method of Sommer and Short (reference 30) gives the best overall prediction. A similar study was performed by Spalding and Chi (reference 7). They compared the predictions of 20 theories with data from 22 sources and found that the method of Van Driest (reference 8) gives the least root-mean-square error, namely, 11 percent. The method of Sommer and Short had a root-mean-square error of 14 percent in their analysis.

Selection of the methods for correlation studies of the present data was dictated partially by the availability of measured values of θ, which means that the starting values, such as skin-friction coefficient and any shape parameter, required in the method of solution selected should be functions of θ. The method of Persh (reference 10) met these requirements, and, in addition, its skin-friction formula is similar to that of the reference-temperature methods used in flat-plate calculations. Furthermore, the nature of the test required a method for estimating heat transfer for variable wall temperature. Of the transformation methods, that of Culick and Hill (reference 9) was selected, mainly because the Truckenbrodt method (reference 37), on which it is based, has performed satisfactorily in incompressible flow. This method requires skin-friction coefficients which are determined by the method of Van Driest. Its heat-transfer calculations are limited to constant wall temperature. It should be pointed out that Coles (reference 33) has some reservation about the justifications for using transform methods

for turbulent compressible flow with pressure gradient.

Persh's Method.

The method of Persh is based on the work of Donaldson (reference 38), who proposed a form of the incompressible skin-friction formula and its extension to the compressible case. The turbulent-shear-stress distribution in the boundary layer is assumed to be given by the Prandtl mixing-length formula

$$\tau_t = \rho \, \ell^2 \frac{\partial U}{\partial Y} \left| \frac{\partial U}{\partial Y} \right| \tag{22}$$

where ℓ is the mixing length expressed by

$$\ell = KY \tag{23}$$

With the further assumption of

$$\frac{U}{U_\delta} = \left(\frac{Y}{\delta}\right)^{1/n} \tag{24}$$

for the velocity profile outside the laminar sublayer, the ratio of the total shear stress to the laminar stress is given by

$$\frac{\tau}{\tau_\ell} = \frac{\mu \frac{\partial U}{\partial Y} + \rho \, \ell^2 \left(\frac{\partial U}{\partial Y}\right)^2}{\mu \frac{\partial U}{\partial Y}} = 1 + \frac{K^2 U_\delta (Y)^{\frac{n+1}{n}}}{n \, \nu (\delta)^{1/n}} \tag{25}$$

The extent of the laminar sublayer is determined from equation (25) under the assumption that the ratio of total to laminar shear stress has a definite value d at the edge of the laminar sublayer. This assumption is equivalent to postulating that the Reynolds number based on the laminar-sublayer thickness, $R_L = U_L \delta_L / \nu$ is constant. Coles developed the latter idea in his RAND paper (reference 33). Replacing Y by δ_L in equation (25) and solving for δ_L, we obtain

$$\frac{\delta_L}{\delta} = \left[\frac{n(d-1)}{K^2} \frac{\nu}{\delta U_\delta} \right]^{\frac{n}{n+1}} \tag{26}$$

If the notion of constant shear stress and a linear velocity distribution in the laminar sublayer is introduced, the skin-friction coefficient can be expressed with the help of equation (26) as

$$c_f = \frac{\tau_w}{\frac{1}{2}\rho U_\delta^2} = 2\left[\frac{n(d-1)}{K^2}\right]^{\frac{1-n}{n+1}}\left[\frac{\nu}{U_\delta\,\delta}\right]^{\frac{2}{n+1}} \tag{27}$$

Extension of equation (27) to compressible flow is accomplished by replacing μ in equation (25) by μ_L and retaining the assumption of constant shear stress in the laminar sublayer. Now both the velocity and viscosity may vary as the wall is approached. After rearrangement, equation (27) becomes

$$c_f = 2\left[\frac{n(d-1)}{K^2}\right]^{\frac{1-n}{n+1}}\left[\frac{1}{R_\delta}\right]^{\frac{2}{n+1}}\frac{\rho_L}{\rho_\delta}\left[\frac{\nu_L}{\nu_\delta}\right]^{\frac{2}{n+1}} \tag{28}$$

Density and the kinematic-viscosity ratios in equation (28) can be replaced by the corresponding temperature ratios if one assumes no normal-pressure gradient and a power law for viscosity-temperature variation, then

$$c_f = 2\left[\frac{n(d-1)}{K^2}\right]^{\frac{1-n}{n+1}}\left[\frac{1}{R_\delta}\right]^{\frac{2}{n+1}}\left[\frac{T_\delta}{T_L}\right]^{\frac{n-2\omega-1}{n+1}} \tag{29}$$

Donaldson originally applied equation (29) to adiabatic flat-plate flow. He assumed a constant n and determined $(d-1)/K^2$ from the Blasius incompressible-skin-friction formula. Modifications for compressible flow with heat transfer and pressure gradient were initiated by Persh (reference 10). He evaluated the ratio of T_δ/T_L in equation (29) from the Crocco quadratic temperature distribution with the appropriate boundary conditions and obtained

$$\frac{T_L}{T_\delta} = 1 + r\,\frac{\gamma-1}{2}M_\delta^{\,2}\left[1-\left(\frac{U_L}{U_\delta}\right)^2\right] + \frac{T_w - T_r}{T_\delta}\left[1-\frac{U_L}{U_\delta}\right] \tag{30}$$

where

$$\frac{U_L}{U_\delta} = \left[\frac{n(d-1)}{K^2}\right]^{\frac{1}{n+1}} \left[\frac{1}{R_\delta}\right]^{\frac{1}{n+1}} \left[\frac{T_L}{T_\delta}\right]^{\frac{1+\omega}{n+1}} \tag{31}$$

The exponent n is a function of R_θ. It is determined by requiring that equation (27) equal the Kármán-Schoenherr skin-friction formula for incompressible flow; thus a unique relationship between n and R_θ and the power profile is established. The value of the fraction $(d-1)/K^2$ was determined from empirical data. Correlation with available data showed that the assumed relationship between n and R_θ is satisfied not only for incompressible flow but also for supersonic and hypersonic flows if $(d-1)/K^2$ is set equal to 20. Justification for the application of the method to flows with pressure gradient is based on the observations of Ludwieg and Tillmann that moderate pressure gradients have no direct effect on skin friction in incompressible flows.

A procedure for calculating boundary layers on a body of revolution with longitudinal pressure gradient and heat transfer is outlined by Persh and Lee (reference 39). Growth of the momentum thickness is calculated from the von Kármán momentum equation by a step-by-step procedure by using the initial value of θ and the external flow conditions. The basic equation is

$$\Delta\theta = \frac{c_f}{2}\Delta s - \frac{\theta\,\Delta M_\delta}{M_\delta}\left[\frac{H + 2 - M_\delta^2}{1 + \frac{\gamma-1}{2}M_\delta^2}\right] - \frac{\theta}{R}\Delta R \tag{32}$$

Then the local skin-friction coefficient can be determined from (29) replacing R_δ by the product of R_θ and δ/θ

$$\frac{1}{2}c_f = \left[20\,n\right]^{\frac{1-n}{1+n}} \left[R_\theta\left(\frac{\delta}{\theta}\right)\right]^{-\frac{2}{n+1}} \left[\frac{T_\delta}{T_L}\right]^{\frac{n-2\omega-1}{n+1}} \tag{33}$$

Needed values of δ/θ and H are calculated from the two-dimensional momentum and displacement thickness definitions together with the power-profile assumptions and the Crocco temperature distribution in the form

$$\frac{T}{T_\delta} = \frac{T_w}{T_\delta} - \left[\frac{T_w - T_r}{T_\delta}\right]\left(\frac{U}{U_\delta}\right) - \left[\frac{T_r - T_\delta}{T_\delta}\right]\left(\frac{U}{U_\delta}\right)^2 \tag{34}$$

The exponent n is determined from the empirical relationship between n and R_θ plotted in reference 38. Calculation of the ratio of the temperature at the edge of the laminar sublayer to the temperature outside the boundary layer T_L/T_δ is performed by successive approximations of equations (30) and (31). The heat-transfer coefficient is determined by means of a modified Reynolds analogy from

$$h_w = \frac{\rho_\delta U_\delta c_p c_f}{2(Pr)^{2/3}} \tag{35}$$

The heat flux at the wall is then obtained from

$$q_w = h_w (T_r - T_w) \tag{36}$$

In the foregoing procedure for calculating δ/θ and H the laminar sublayer is ignored and the power profile is assumed to extend to the wall. This approximation is not quite exact, but since the main contribution to the integrals comes from outside the laminar sublayer, the resulting errors will be small.

Modified Truckenbrodt Method.

Culick and Hill (reference 9) apply a Stewartson-Illingsworth type transformation to the momentum equation for compressible boundary-layer flow. The resulting transformed equation is identical to the momentum equation for incompressible flow if (a) the effect of compressibility on boundary-layer shape parameter H can be expressed by

$$H = (H' + 1)\left(\frac{T_r}{T_\delta}\right) - 1 \tag{37}$$

and (b) the s-coordinate transformation is related to the ratio of skin-friction coefficients in compressible and incompressible flows by

$$\frac{ds'}{ds} = \eta \left(\frac{c_f}{c_f'}\right) \tag{38}$$

where

$$\eta = \left(\frac{T_r}{T_\delta}\right)^{\frac{\gamma+1}{2(\gamma-1)}} \tag{39}$$

and the primes refer to the transformed quantities. The remaining quantities to be transformed follow the Stewartson-Illingworth transformation:

$$Y' = \eta \int_0^Y \frac{\rho}{\rho_\delta}\, dY \qquad \text{with} \quad \theta' = \eta\, \theta \tag{40}$$

$$U_\delta' = \frac{a_T}{a_\delta} \tag{41}$$

$$T' = T_T \tag{42}$$

Both H and c_f depend on Reynolds number, pressure gradient, and Mach number. The effect of pressure gradient is assumed to be small if accelerated flows are considered. For the variation of H' and c_f' with R_θ' in incompressible flows, the authors used the approximate formula for skin friction.

$$\frac{c_f'}{2} = \frac{\alpha(N)}{(R_\theta')^{1/N}} \tag{43}$$

where N and $\alpha(N)$ were chosen such that a good agreement with the Kármán-Schoenherr skin-friction formula was obtained for a range of R_θ'. It follows from the form of equation (43) that for each value of N there is a corresponding value of H'. Values for $\alpha(N)$ and H' are tabulated in reference 9 for integral values of N. Each value of N covers a range of R_θ'. Experimental verification of equation (37) can now be carried out. The authors found good agreement for flows with zero heat transfer and $M_\delta < 5.0$.

In order to evaluate the s-transformation defined by equation (38), the authors extended the incompressible skin-friction formula (43) to compressible flow by the concept of reference temperature T^* as used by Monaghan (reference 40)

$$\frac{c_f}{2} = \frac{\alpha(N)}{\left(\dfrac{\rho^* U_\delta\, \theta}{\mu^*}\right)^{1/N}} \frac{\rho^*}{\rho_\delta} \tag{44}$$

where the asterisk refers to quantities evaluated at the reference temperature, and $\alpha(N)$ is the same function as in equation (43).

Forming the ratio of equations (44) and (45) and assuming fixed R_θ results in

$$\frac{c_f}{c_f'} = \left(\frac{\mu^*}{\mu_T}\right)^{\frac{1}{N}} \left(\frac{T_\delta}{T^*}\right)^{\frac{N-1}{N}} \tag{45}$$

Correlation with experimental data of Coles (reference 41) gave best agreement if $T^* = T_T$ or

$$\frac{c_f}{c_f'} = \left(\frac{T_\delta}{T_T}\right)^{\frac{N-1}{N}} \tag{46}$$

The transformation is completely defined for $\gamma = 1.4$ by

$$U_\delta' = a_T M_\delta \tag{47}$$

$$\theta' = \left(\frac{T_\delta}{T_T}\right)^3 \theta \tag{48}$$

$$s' = \int \left(\frac{T_\delta}{T_T}\right)^{4-1/N} ds \tag{49}$$

and should be valid according to the authors, for small heat-transfer rates.

Its application to retarded flows follows in principle if separation is not approached. The relationships (47), (48), and (49) are now inserted into Truckenbrodt's quadrature formula (reference 37), which in our case takes the axisymmetric form

$$\left(\frac{\theta}{c}\right)_2^{\frac{N+1}{N}} = \frac{C' + \left(\frac{C_F}{2}\right)_2^{\frac{N+1}{N}} \int_{(s/c)_1}^{(s/c)_2} \left(\frac{U}{U_\delta}\right)^{3+\frac{2}{N}} \left(\frac{R}{c}\right)^{\frac{N+1}{N}} d\left(\frac{s}{c}\right)}{\left(\frac{U}{U_\delta}\right)_2^{3+\frac{2}{N}} \left(\frac{R}{c}\right)_2^{\frac{N+1}{N}}} \tag{50}$$

where

$$C' = \left[\left(\frac{U}{U_\delta}\right)_1^3 \left(\frac{R}{c}\right)_1 \left(\frac{\theta}{c}\right)_1\right]^{\frac{N+1}{N}} \tag{51}$$

and all quantities refer to incompressible flow. The quantity C_F is the average flat-plate skin-friction coefficient based on c and flow properties at the upper limit. Substitution of the transformation gives for compressible axisymmetric flow

$$\left(\frac{\theta}{c}\right)_2^{\frac{N+1}{N}} = \frac{C + \left(\frac{C_F}{2}\right)_2^{\frac{N+1}{N}} \int_{(s/c)_1}^{(s/c)_2} \left(M_\delta\right)^{3+\frac{2}{N}} \left(\frac{T_\delta}{T_{T_\infty}}\right)^{4-\frac{1}{N}} \left(\frac{R}{c}\right)^{\frac{N+1}{N}} d\left(\frac{s}{c}\right)}{\left(M_\delta\right)_2^{3+\frac{2}{N}} \left(\frac{T_\delta}{T_{T_\infty}}\right)_2^{4-\frac{1}{N}} \left(\frac{R}{c}\right)_2^{\frac{N+1}{N}}} \tag{52}$$

and

$$C = \left[\frac{\left(\frac{\theta}{c}\right)_1 \left(\frac{T_\delta}{T_{T_\infty}}\right)_1 (M_\delta)_1^3 \left(\frac{R}{c}\right)_1}{\left(\frac{T_\delta}{T_{T_\infty}}\right)_2 (M_\delta)_2^3 \left(\frac{R}{c}\right)_2}\right]^{\frac{N+1}{N}} \tag{53}$$

The quantity $(C_F/2)_2$ can be expressed in terms of flow properties at any station; for example, refering to free-stream properties, we get

$$\left(\frac{C_F}{2}\right)_2 = \left(\frac{C_F}{2}\right)_\infty \left(\frac{M_\infty}{M_\delta}\right)_2^{\frac{1}{N+1}} \left(\frac{T_\infty}{T_\delta}\right)_2^{\frac{4-N}{N+1}} \tag{54}$$

where $(C_F/2)_\infty$ is based on the velocity U_∞ and the length c. Calculation is started at the initial point on the basis of knowing the displacement thickness and all flow properties. Since the calculations start with a finite value of boundary-layer thickness, the virtual origin of the boundary layer has to be known, in order that the reference length be consistent with the skin-friction coefficient $(C_F/2)_2$. For that purpose one can use Van Driest's flat-plate formula for average skin-friction coefficient (reference 8). The value of $C_F/2$ at the beginning of the integration, denoted as $(C_F/2)_1$, can now be calculated by replacing the product $R_{s_1} \times C_{F_1}$ by $2R_{\theta_1}$; now with $(C_F/2)_1$ known, the virtual origin s_0 is calculated from $\frac{1}{s_0} = (C_F/2)_1/\theta_1$. The reference length or chord is simply

$$c = s_0 + (s_2 - s_1) \tag{55}$$

Once c is known, the skin-friction coefficient $(C_F/2)_2$ can be solved directly from Van Driest's equation. The exponent N, which can vary from 4 to 8, has only a small effect on final results. All calculations were based on $N = 6$.

Discussion of Results.

Figure 36 shows the comparison of the measured and calculated momentum-thickness growth along the bodies tested. In order to check agreement between the two methods of predicting boundary-layer growth and to compare with measured values, the momentum-thickness growth was first calculated for a set of data where no pressure gradients — neither axial nor normal — existed. The data were those obtained by Michel (reference 3) on a circular cylinder at Mach numbers from 1.85 to 2.96. The maximum deviation between the calculated values was two percent and that between the measured and calculated values was five percent.

Before any conclusions are drawn from comparisons, the limitations of the program and calculations are summarized. Both programs use methods for calculating skin-friction coefficients that neglect the effect of large longitudinal-pressure gradients. Normal-pressure gradients are neglected entirely, since their effect on skin friction is not known at present. Other difficulties are encountered in predicting the momentum-thickness growth on a body of revolution if the boundary-layer thickness is approaching the same order of magnitude as that of the body radius. To properly account for such conditions, knowledge of shear-stress variation through the boundary layer is necessary. Transverse-curvature effects were also neglected in the momentum thickness calculated from the measured profiles, as was discussed in relation to equations(10) to (12).

Figure 36 shows that, with few exceptions, the agreement between the two methods of calculating momentum-thickness growth is very good, even for the heat-transfer case where the Truckenbrodt, Culick-Hill method assumes constant wall temperature. The longitudinal-pressure gradient used in the calculations is based on the measured values at the edge of the boundary layer.

Figures 36(a) to (d) show momentum-thickness growth on the blunt center section. The measured values at Mach numbers of 1.61 and 3.30 agree well with the trend of those predicted. However, the growth predicted at Mach 2.58 shows considerable increase with x, whereas the measured momentum thickness is nearly constant. There is also disagreement at Mach 4.5. The dip in the predicted values at station 14 is probably due to a shock impingement; surface pressures in figure 23(d) indicate the presence of a shock.

Figure 36 (e) to (g) show the momentum-thickness variation on the concave center section. The predicted trend agrees reasonably well with the experimental data except at station 2. At Mach 3.30 there is an initial growth of the momentum thickness that is not predicted by the theory. Here the confrontation of the boundary layer with a sudden adverse pressure gradient, together with transverse curvature and vertical-pressure-gradient effects, makes it unlikely that the calculated model is at all similar to the real one. Agreement is better at Mach numbers 1.61 and 4.50; this is partially due to a much weaker initial adverse pressure gradient.

Figures 36 (h) to (k) show the momentum-thickness distribution on the convex center section with a nearly adiabatic surface temperature. At Mach 1.61 the agreement between the measured and predicted values is good. For the other Mach numbers no consistency between the predicted and measured values is evident. Figures 36 (ℓ) to (o) show the momentum-thickness variation on the convex center section with a cooled surface. Here the agreement between the predicted and measured momentum thickness is acceptable at Mach numbers 1.61 and 3.30. For the other two Mach numbers agreement is poor at some stations, as was also true in the case of adiabatic-wall temperature.

Comparison of the momentum-thickness variation for the nearly adiabatic surface and cooled surface shows that, in general, the momentum thickness tends to be thicker on the cooled surface, as is to be expected. This tendency does not always hold, for in some cases the curve of momentum thickness with distance for the cooled wall crosses that for the adiabatic wall. As has been pointed out earlier, the portion of the body ahead of the measuring stations is cooled for a comparatively short distance, as compared to the

total distance over which the boundary layer has developed. Thus the effect of cooling has not yet diffused through the relatively thick boundary layer. Consequently, cooling effects should increase farther downstream, and that they do is evident from the measured data.

Some plots, noticeably figures 36 (j) and (k), show opposite trends for momentum-thickness growth from those predicted by the theories. It is not believed that these discrepancies can be accounted for by experimental errors or shock impingement. If the results from incompressible constant-pressure flows have any bearing on the problem, then the discussion by Clauser (reference 27) should be of interest. He points out that any distortion of the velocity profile outside the constant shear layer will prevail for a long distance downstream, or, in other words, that portion of the boundary layer has a long memory. Therefore it is possible that on both the blunt and the convex center sections the separation and/or shock interaction at their juncture with the nose pieces distorts the velocity profiles to such an extent that the momentum-thickness growth is distorted. The prediction of momentum thickness growth for the concave center section agrees fairly well with experiments. This is somewhat surprising, because the largest transverse curvature and negative normal-pressure gradient appear here. It is difficult to determine which of the simplifications and omissions previously described are counterbalancing each other, and whether or not they are justified.

Momentum-thickness correlation plots for each of the center sections are presented in figure 37. The measured values are compared with those calculated by the methods of Persh, and Truckenbrodt, Culick and Hill. It is seen that the correlation for the blunt center section, which approximates flows with no pressure gradients, is quite good. The root-mean square errors are 6.5 and 6.8 percent, respectively, for the two methods considered. The correlation plot for the concave center section shows slightly more scatter and a tendency for the calculated values to be higher than the measured ones. The root-mean-square errors are 9.0 and 11.4 percent, respectively. The results for the convex center section with a nearly adiabatic wall are more discouraging. The excessive scatter may be due to shock impingement for some data points and possible errors in data recording for others. The

root-mean-square errors amount to 19.9 and 22.1 percent in this case. The cooled convex center section shows a better correlation between the measured and the calculated values than the adiabatic-wall case, with the root-mean-square errors reduced to a reasonable 11.6 percent for both methods. If the data points for the nearly adiabatic convex center section are omitted, the overall root-mean-square error (less than 11 percent) is below that of the best flat-plate method presented in reference 7. With all data points included, the root-mean-square errors amount to 13.9 and 15.3 percent, respectively.

Correlation of the measured shape parameter and that calculated by Persh's method is shown in figure 38. Except at the Mach number of 1.61, the calculated shape parameter is consistently higher than the measured values. In addition, for the cooling case, the deviation from a perfect correlation increases with increasing Mach number.

Modification of the existing theories for the normal-pressure gradient and transverse-curvature effects were attempted separately. Since the variation of normal pressure affects the density distribution in the boundary layer, it was taken into account in the definition of the momentum thickness by substituting the measured pressure and Crocco's temperature distribution for density. A check with Michel's results (reference 3) in two-dimensional flow showed that such an addition to Persh's method accounts for most of the discrepancies between measurements and the simpler theory. A similar modification of the axisymmetric case had hardly any effect on the final results. Transverse-curvature effects were studied by using the quadratic momentum thickness from equation (21) in conjunction with the momentum equation (32). As was to be expected, the momentum-thickness growth was somewhat slower and the skin-friction coefficient higher, but there was no reversal of trends similar to those found in the test. At this point it became quite clear that piecewise modification of the thin-boundary-layer theories is not sufficient. The rigid assumptions of power profiles and a unique relationship between n and R_θ are inconsistent with experimental trends observed for boundary-layer profiles. Furthermore, any modification that was tried made use of the assumed c_f, n, and R_θ relationship, which is obviously not applicable if the definition of θ is changed in any way. It was concluded

that without shear-stress measurements, or some important new idea, no progress in improving the present theories can be made.

Heat transfer calculated by Persh's method is presented in figure 39. The average measured heat-transfer values were from 30 percent to 100 percent greater than the calculated values. Since the repeatability of data points was poor, a scatter approaching 100 percent being observed, comparison between the measured and predicted values is omitted. The scatter was probably due to the thermocouple and oscillograph system; but because of the termination of operation of the wind-tunnel facilities there was no opportunity for further checking the instrumentation or repeating runs.

11.0 THE LAW OF THE WALL

The existence of the law of the wall has been well established for incompressible turbulent flows both with and without longitudinal pressure gradients, and for compressible flow for the case of zero pressure gradient. This law is expressed mathematically by the following relation for the velocity in the boundary layer:

$$\frac{U}{U_\tau} = f\left(\frac{YU_\tau}{\nu_w}\right) = A \log\left(\frac{YU_\tau}{\nu_w}\right) + B \qquad (56)$$

the velocity U_τ is the friction velocity $\sqrt{\tau_w/\rho_w}$. It would be useful to have relations similar to equation (56) in compressible flow. Such generalizations, if they produce a universal "law", could be used to find the wall shear stress from boundary-layer profiles in a manner analogous to that used by Clauser (reference 27) in incompressible flow. Extensions of the incompressible mixing-length theories to the compressible case were formulated by Wilson (reference 42), Van Driest (reference 43), and Coles (reference 41). Plots of data in terms of the non-dimensional variables postulated have shown residual effects at Mach number. It seems that the problem is necessarily more complicated than the assumptions embodied in the mixing-length analysis.

In reference 33 Coles develops a transformation that reduces the boundary-layer equations for compressible flow to the incompressible form. He establishes the transformation for the special case of adiabatic flat-plate flow. Application of the Coles transformation to the data measured in the present investigation for the cases of weak pressure gradients and also to the data of references 3 and 44 did not, however, lead to any meaningful results. The measured data were also studied by plotting velocity directly against log Y, that is, in the form represented by (56). Results are compared below with the incompressible form of (56), known as the "universal velocity profile".

The velocity profiles were also plotted according to what is called the universal law of the wall developed by Rotta (reference 45). He extended the concept of the law of the wall and the velocity-defect law from incompressible turbulent boundary-layer theory to the turbulent boundary layer

at supersonic Mach numbers and with heat transfer. The equation for the universal-type velocity profiles is given by

$$\frac{U}{U_\tau} = \frac{\sqrt{C_1}}{\sqrt{Pr \frac{\gamma - 1}{2}} M_\tau} \sin \left\{ \sqrt{Pr \frac{\gamma - 1}{2}} M_\tau \left(\frac{1}{K} \log \frac{YU_\tau}{\nu_w} + C_2 \right) \right\} +$$

$$+ \frac{\beta_q}{(\gamma - 1) M_\tau^2} \left\{ 1 - \cos \left[\sqrt{Pr \frac{\gamma - 1}{2}} M_\tau \left(\frac{1}{K} \log \frac{YU_\tau}{\nu_w} + C_2 \right) \right] \right\} \quad (57)$$

where C_1 and C_2 are empirical constants determined from the following expressions:

$$C_1 = 1 - 3.4 \beta_q - 0.2 M_\tau$$
$$C_2 = 5.2 + 70 \beta_q + 5 M_\tau \quad (58)$$

The other parameters are defined by

$$M_\tau = \sqrt{\frac{\tau_w}{\gamma P_w}} \quad (59)$$

$$U_\tau = \sqrt{\frac{\tau_w}{\rho_w}} \quad (60)$$

$$\beta_q = \frac{q_w}{\rho_w c_p T_w U_\tau} \quad (61)$$

The turbulent Prandtl number Pr and the constant K were taken as 0.9 and 0.4, respectively.

In order to make use of either (56) or (57), it is necessary to know the shear stress or the equivalent skin-friction coefficient. Since that phase of wind-tunnel testing that included skin-friction measurements by a floating element could not be concluded, calculated skin-friction values were used instead of measured values. Preliminary results of the floating-element measurements are included at the end of this section.

The skin-friction coefficients were calculated by the method of Persh presented earlier in this report. In determining the empirical constants C_1 and C_2 in (57), Rotta has made use of the same experimental data as

those that were used by Persh in developing his method, thus giving consistency to the approach used. Figures 40 to 43 contain the universal-type velocity profiles for representative stations, together with the incompressible universal velocity profile as given by Coles in reference 46. Data points plotted are from curves faired through measured data points.

Figures 40 (a), (b), and (c) show universal-type profiles of the data measured on the blunt center section. These data were obtained in regions with weak pressure gradients. Figure 41 shows typical universal-type profiles for the concave center section. Figures 41 (a), (c), and (e) are also for profiles with weak pressure gradients, whereas the figures 41 (b), (d), and (f) represent profiles with positive longitudinal pressure gradients and negative normal pressure gradients. Figures 42 (a) to (d) depict the universal-type profiles for the convex center section with a nearly adiabatic-surface temperature and negative longitudinal and positive normal pressure gradients. Figures 43 (a) to (d) show the profiles for the same conditions as those in figure 42, except that the model surface is cooled.

Data from other sources (references 3 and 44) were also studied in light of the law of the wall. Figures 44 (a) and (b) show universal-type profiles for a flat plate at Mach 2.57 from reference 3. Figures 45 (a) to (d) show universal-type profiles for a slender ogive-cylinder at stations with very small or no pressure gradients. These data, from reference 44, were taken at Mach numbers 2.98 and 4.88. More information about the profiles from references 3 and 44 can be found in Table VIII.

Several qualitative statements of general nature about the universal-type profiles can be made. First, the law-of-the-wall-type variation exists, but the profile slope is affected by Mach number and heat transfer. Second, for the cases without pressure gradient, the two ways of plotting the profiles agree surprisingly well. Furthermore, these profiles almost coincide with the incompressible profile up to Mach 2.58, but then their slopes diminish with increasing Mach number. Third, pressure gradient does not seem to have much effect on this slope pattern, but it does affect the magnitude of the two types of plots with respect to each other. Fourth, heat transfer in the form of cooling tends both to increase the slope of the universal-type profiles and,

in general, to raise the profiles above the incompressible value. This tendency increases with Mach number. Attempts to modify the two law-of-the-wall relations — (56) and (57) — to account for normal pressure gradients were not successful.

As noted above, attempts to measure skin friction directly with the floating-element balance were not very successful. Measurements could not be repeated with any accuracy for most of the flows tested. Repeatability decreased with increasing Mach number. Approximately one third of the scatter could be ascribed to the temperature sensitivity of the balance. Vibration could have been the other cause, although bench tests showed no such effects on repeatability.

No measurements were carried out at Mach 1.61, because the reflected shock impinged either on or ahead of the floating element. At Mach 2.58 the force measured varied from 1.83 grams to 2.09 grams for 17 measurements, giving a skin-friction coefficient based on the average force of 0.00121 as compared to 0.00132 from calculations by the method of Persh and Lee. For Mach 3.30 the averages of measured and calculated skin-friction coefficients were equal to 0.00150 and 0.00124, respectively. The measured force varied from 1.10 grams to 1.87 grams for the 9 measurements taken. At Mach 4.50 the seven measurements gave a force variation from 0.50 to 0.86 grams, with the resulting skin-friction coefficient based on the average force equal to 0.00170 as compared to 0.00120 by calculation.

The trend of the measured skin-friction coefficient variation with Mach number is opposite to that for the calculated values. No explanation for this phenomenon can be found in the measured velocity profiles or pressure gradients, since the velocity profiles are approximated by power profiles quite well and no measurable longitudinal pressure gradient was evident in the balance itself.

It should be realized that all the results and conclusions are based on the calculated skin-friction coefficient and may hence be in error. To remedy the situation, several other methods for determining wall shear stress were considered. Measurement of the velocity-profile slope at the wall was

not possible, because only a few data points were recorded in the laminar sublayer. Considerable time was spent on trying to apply the Preston-tube measurements and to use the lowest total-head probe as a Stanton tube. Originally, the plan was to calibrate the Preston tube against the floating-element measurements and to use it for shear-stress measurements on curved segments of the body surface. A search of the literature showed that the tests by Stalmach (reference 47) covered approximately the same test range and Preston-tube size as the present one. With his nondimensional calibration curve and the Preston-tube measurements new skin-friction coefficients were calculated. These values differed widely from those calculated by the method of Persh; and when several inconsistencies were found in the results, it was concluded that either the detailed geometry of the Preston tube was different from the ones used in reference 47 or the pressure recording was in error.

The idea of the Stanton tube is based on the measurement in the linear portion of the velocity profile; whereas the Preston-tube measurements are in the law-of-the-wall range. The calibration procedure for Stanton tubes is outlined in reference 48. Reference 44 used total-head probes identical to those used in this test, and the wall shear stress was determined from direct measurements. With the data from the above source for calibration, it was assumed that the lowest total-head probe in contact with the body surface simulates the Stanton tube. Calculations of the skin-friction coefficients from the measured data proved disappointing; excessive randomness of the measured total-head pressure was evident. It is suspected that the relatively blunt total-head probe may separate the boundary layer in front of the probe and distort the pressure readings.

12.0 CONCLUDING STATEMENTS

1. It is believed that the measurements presented provide the needed data on supersonic boundary layers. Accurate profiles of velocity, temperature, and pressure through the boundary layer were measured for large ranges in both pressure gradients and heat-transfer rates at speeds from Mach 1.5 to 4.5. Accurate measurements of heat transfer and skin friction were not obtained in the wind-tunnel tests.

2. Prediction of the momentum-thickness growth of a thick axisymmetric boundary layer in flow with pressure gradient can be accomplished reasonably well with existing boundary-layer theories (the methods of Persh and Truckenbrodt, Culick and Hill), which are based on thin-boundary layer assumptions. If the data points for the most extreme flow — the adiabatic convex center section — are omitted, the average root-mean-square error difference between the momentum thickness measured and that calculated for all the data is less than 11 percent. For the most extreme flow case the average error is about 20 percent. The method of Persh agrees with the measurements slightly better than the method of Truckenbrodt, Culick and Hill (an average root-mean-square error of 13.9 percent, as compared to 15.3 percent); but less work is involved in making predictions by the modified Truckenbrodt method.

3. Prediction of the skin-friction coefficient with the above methods may be in error, since the methods neglect the effects of normal-pressure gradient and the second-order transverse-curvature terms. The magnitude of this error could not be determined, since no accurate measure of the skin friction could be obtained. Also, knowledge of the skin friction and shear distribution through the boundary layer appears necessary before existing methods can be modified to account for the above effects.

4. The transformation developed by Coles that proved successful in transforming any compressible adiabatic flat-plate velocity profile to an incompressible profile does not appear to be applicable under conditions of large pressure changes in either the direction parallel to or normal to the flow.

5. Finally, it is believed that general profile data on supersonic turbulent boundary layers are now sufficient. Further experimental measurements that would be useful are those on heat transfer and skin friction. Concerning further development of theory, it would be useful to apply existing methods that have proved successful in solving the general laminar-boundary-layer equations together with the turbulent-profile measurements, to determine the eddy viscosity distribution through the boundary layer.

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TABLE III

SUMMARY OF MEASURED DATA INCLUDING INTEGRATED THICKNESSES

Station	M_∞	T_w/T_δ	M_δ	δ^* (in.)	θ (in.)	θ_E (in.)
(a) BLUNT CENTER SECTION						
4	1.61	1.496	1.738	.07981	.03570	.06737
6		1.468	1.676	.08678	.04014	.07531
6	2.58	2.136	2.631	.1896	.05299	.09978
8		2.132	2.625	.1836	.05130	.09621
12		2.164	2.634	.1891	.05223	.09709
14		2.125	2.616	.1889	.05240	.09776
10	3.30	2.873	3.277	.2021	.04090	.07686
12		2.932	3.309	.2138	.04490	.08427
14		2.911	3.311	.2164	.04533	.08502
16		2.854	3.206	.2216	.04612	.08640
10	4.50	2.090	4.243	.3863	.04808	.08994
12		4.238	4.323	.3933	.04817	.09021
14		3.908	4.072	.3904	.05009	.09349
16		4.553	4.488	.3859	.05071	.09437
(b) CONCAVE CENTER SECTION						
0	1.61	1.432	1.601	.1181	.05391	.09880
2		1.422	1.589	.1233	.05654	.1020
6		1.374	1.492	.1030	.05004	.09046
8		1.372	1.478	.09382	.04335	.07887
10		1.347	1.431	.08704	.04234	.07681
0	3.30	3.011	3.400	.2443	.04658	.08579
2		2.855	3.269	.1538	.05143	.09399
6		2.765	3.197	.1642	.03891	.07117
8		2.612	3.067	.1320	.03018	.05540
10		2.538	3.010	.1113	.02582	.04781
0	4.50	3.879	4.059	.2254	.03354	.06058
2		4.524	4.485	.2198	.03427	.06220
6		4.003	4.166	.2024	.02636	.04771
8		3.711	3.960	.1570	.02138	.03923
10		3.368	3.735	.1197	.01859	.03442

TABLE III (CONCLUDED)

Station	M_∞	T_w/T_δ	M_δ	δ^* (in.)	θ (in.)	θ_E (in.)
(c) CONVEX CENTER SECTION WITH A NEARLY ADIABATIC WALL						
-2	1.61	1.491	1.593	.1095	.05011	.09130
2		1.383	1.409	.1015	.05347	.09633
4		1.409	1.467	.08111	.04434	.08134
6		1.424	1.505	.07500	.03761	.06963
8		1.450	1.570	.06902	.03339	.06273
10		1.492	1.626	.06951	.03268	.06170
12		1.513	1.653	.06177	.03228	.06093
6	2.58	1.934	2.351	.1218	.04090	.07748
8		2.086	2.509	.1282	.0435	.08212
10		2.082	2.512	.13875	.03847	.07307
12		2.128	2.553	.1572	.04797	.09065
14		2.184	2.611	.1591	.04230	.07951
18		2.212	2.635	.1965	.05449	.1012
8	3.30	2.853	3.276	.1549	.03278	.06116
10		2.906	3.299	.1492	.03068	.05784
12		3.107	3.477	.1140	.01868	.03574
14		3.131	3.503	.1205	.02369	.04488
18		3.023	3.402	.1416	.02813	.05264
12	4.50	4.374	4.404	.2205	.03077	.05201
14		4.223	4.295	.2262	.03699	.06898
18		3.702	3.947	.2436	.03820	.07007
22		4.159	4.249	.2495	.03277	.06074
(d) CONVEX CENTER SECTION WITH A COOLED WALL						
6	1.61	.9486	1.507	.06771	.03722	.06905
8		.8749	1.570	.06071	.0325	.06072
10		.9831	1.633	.06547	.03352	.06255
12		1.161	1.662	.06704	.03388	.06356
6	2.58	1.241	2.363	.1147	.04280	.07989
8		1.225	2.518	.1151	.05189	.09519
10		1.405	2.529	.1373	.04314	.08051
14		1.403	2.635	.1530	.04534	.08366
10	3.30	1.824	3.219	.1007	.02694	.04987
12		1.884	3.402	.09746	.02743	.05111
14		1.903	3.456	.1233	.03260	.05961
10	4.50	2.882	4.084	.1124	.03005	.05514
12		3.034	4.411	.1367	.02951	.05464
14		3.358	4.327	.1496	.03639	.06675

TABLE IV - PROFILES OF VELOCITY, TEMPERATURE, AND PRESSURE FOR THE BLUNT CENTER SECTION.

(a) $M_\infty = 1.61$ STATION 4 T_w/T_δ - 1.490

$\delta = 0.750$ IN $M_\delta = 1.738$ $T_\delta = 344.2$ °R $U_\delta = 1580$ FT/SEC $T_{T_\delta} = 552.1$ °R

$\rho_\delta = 1.169$ $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.847$ SLUGS/FT²-SEC $P_\delta = 690.35$ PSF

y/y_δ	M/M_δ	T/T_δ*	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1497E 01	0.	0.9331E 00	0.6680E 00	0.	0.1913E-00	0.1000E 01
0.0067	0.5610E 00	0.1273E 01	0.6331E 00	0.9448E 00	0.7852E 00	0.4972E-00	0.3518E-00	0.1000E 01
0.0133	0.6211E 00	0.1241E 01	0.6920E 00	0.9538E 00	0.8058E 00	0.5576E 00	0.3981E-00	0.1000E 01
0.0200	0.6670E 00	0.1215E 01	0.7354E 00	0.9612E 00	0.8228E 00	0.6051E 00	0.4400E-00	0.1000E 01
0.0267	0.7059E 00	0.1191E 01	0.7706E 00	0.9663E 00	0.8393E 00	0.6468E 00	0.4804E-00	0.1000E 01
0.0333	0.7353E 00	0.1173E 01	0.7966E 00	0.9704E 00	0.8522E 00	0.6789E 00	0.5143E 00	0.1000E 01
0.0400	0.7588E 00	0.1159E 01	0.8170E 00	0.9737E 00	0.8628E 00	0.7049E 00	0.5437E 00	0.1000E 01
0.0467	0.7763E 00	0.1148E 01	0.8319E 00	0.9762E 00	0.8710E 00	0.7246E 00	0.5669E 00	0.1000E 01
0.0533	0.7895E 00	0.1140E 01	0.8431E 00	0.9781E 00	0.8772E 00	0.7396E 00	0.5854E 00	0.1000E 01
0.0600	0.7993E 00	0.1134E 01	0.8512E 00	0.9796E 00	0.8820E 00	0.7508E 00	0.5995E 00	0.1000E 01
0.0667	0.8073E 00	0.1129E 01	0.8578E 00	0.9807E 00	0.8858E 00	0.7599E 00	0.6113E 00	0.1000E 01
0.1000	0.8279E 00	0.1116E 01	0.8747E 00	0.9838E 00	0.8960E 00	0.7838E 00	0.6432E 00	0.1000E 01
0.1333	0.8371E 00	0.1110E 01	0.8822E 00	0.9851E 00	0.9006E 00	0.7946E 00	0.6581E 00	0.1000E 01
0.1667	0.8464E 00	0.1104E 01	0.8895E 00	0.9862E 00	0.9056E 00	0.8056E 00	0.6734E 00	0.1000E 01
0.2000	0.8546E 00	0.1098E 01	0.8959E 00	0.9870E 00	0.9102E 00	0.8155E 00	0.6875E 00	0.1000E 01
0.2333	0.8624E 00	0.1093E 01	0.9016E 00	0.9877E 00	0.9147E 00	0.8249E 00	0.7010E 00	0.1000E 01
0.2667	0.8701E 00	0.1088E 01	0.9077E 00	0.9884E 00	0.9191E 00	0.8343E 00	0.7148E 00	0.1000E 01
0.3000	0.8777E 00	0.1083E 01	0.9134E 00	0.9891E 00	0.9235E 00	0.8436E 00	0.7287E 00	0.1000E 01
0.3333	0.8857E 00	0.1077E 01	0.9194E 00	0.9898E 00	0.9282E 00	0.8534E 00	0.7435E 00	0.1000E 01
0.3667	0.8947E 00	0.1071E 01	0.9261E 00	0.9906E 00	0.9336E 00	0.8646E 00	0.7608E 00	0.1000E 01
0.4000	0.9048E 00	0.1064E 01	0.9336E 00	0.9915E 00	0.9396E 00	0.8772E 00	0.7808E 00	0.1000E 01
0.4333	0.9148E 00	0.1057E 01	0.9408E 00	0.9924E 00	0.9457E 00	0.8897E 00	0.8010E 00	0.1000E 01
0.4667	0.9255E 00	0.1050E 01	0.9485E 00	0.9934E 00	0.9522E 00	0.9032E 00	0.8233E 00	0.1000E 01
0.5000	0.9356E 00	0.1043E 01	0.9556E 00	0.9943E 00	0.9585E 00	0.9161E 00	0.8451E 00	0.1000E 01
0.5333	0.9449E 00	0.1037E 01	0.9623E 00	0.9951E 00	0.9643E 00	0.9280E 00	0.8657E 00	0.1000E 01
0.5667	0.9544E 00	0.1030E 01	0.9690E 00	0.9959E 00	0.9703E 00	0.9403E 00	0.8874E 00	0.1000E 01
0.6000	0.9631E 00	0.1025E 01	0.9751E 00	0.9967E 00	0.9759E 00	0.9516E 00	0.9078E 00	0.1000E 01
0.6333	0.9696E 00	0.1020E 01	0.9796E 00	0.9973E 00	0.9800E 00	0.9600E 00	0.9233E 00	0.1000E 01
0.6667	0.9757E 00	0.1016E 01	0.9837E 00	0.9978E 00	0.9840E 00	0.9680E 00	0.9382E 00	0.1000E 01
0.7000	0.9803E 00	0.1013E 01	0.9869E 00	0.9982E 00	0.9870E 00	0.9741E 00	0.9496E 00	0.1000E 01
0.7333	0.9846E 00	0.1010E 01	0.9898E 00	0.9986E 00	0.9898E 00	0.9797E 00	0.9603E 00	0.1000E 01
0.7667	0.9878E 00	0.1008E 01	0.9919E 00	0.9989E 00	0.9919E 00	0.9838E 00	0.9683E 00	0.1000E 01
0.8000	0.9902E 00	0.1006E 01	0.9936E 00	0.9991E 00	0.9935E 00	0.9871E 00	0.9746E 00	0.1000E 01
0.8333	0.9930E 00	0.1005E 01	0.9955E 00	0.9993E 00	0.9953E 00	0.9908E 00	0.9818E 00	0.1000E 01
0.8667	0.9951E 00	0.1003E 01	0.9965E 00	0.9995E 00	0.9967E 00	0.9936E 00	0.9872E 00	0.1000E 01
0.9000	0.9969E 00	0.1002E 01	0.9980E 00	0.9997E 00	0.9979E 00	0.9959E 00	0.9918E 00	0.1000E 01
0.9333	0.9979E 00	0.1001E 01	0.9987E 00	0.9998E 00	0.9986E 00	0.9973E 00	0.9945E 00	0.1000E 01
0.9667	0.9990E 00	0.1001E 01	0.9994E 00	0.9999E 00	0.9993E 00	0.9987E 00	0.9973E 00	0.1000E 01
1.0000	1.0000E 00	0.9999E 00	0.1000E 01	1.0000E 00	1.0000E 00	0.1000E 01	0.1000E 01	0.1000F 01

*0.1497E 01 means 0.1497×10^1

TABLE IV - CONTINUED.

(b) $M_\infty = 1.61$ STATION 6 $T_w/T_\delta = 1.468$

$\delta = 0.825$ IN $M_\delta = 1.676$ $T_\delta = 354.8$ °R $U_\delta = 1547$ FT/SEC $T_{T_\delta} = 554.1$ °R

$\rho_\delta = 1.244 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.925$ SLUGS/FT²-SEC $P_\delta = 757.54$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1469E 01	0.	0.9406E 00	0.6809E 00	0.	0.2101E-00	0.1000E 01
0.0061	0.5323E 00	0.1260E 01	0.5977E 00	0.9356E 00	0.7935E 00	0.4741E-00	0.3524E-00	0.1000E 01
0.0121	0.6074E 00	0.1216E 01	0.6699E 00	0.9399E 00	0.8226E 00	0.5509E 00	0.4061E-00	0.1000E 01
0.0182	0.6463E 00	0.1194E 01	0.7063E 00	0.9441E 00	0.8376E 00	0.5914E 00	0.4392E-00	0.1000E 01
0.0242	0.6732E 00	0.1181E 01	0.7316E 00	0.9485E 00	0.8472E 00	0.6196E 00	0.4646E-00	0.1000E 01
0.0303	0.6967E 00	0.1169E 01	0.7534E 00	0.9528E 00	0.8555E 00	0.6443E 00	0.4885E-00	0.1000E 01
0.0364	0.7179E 00	0.1159E 01	0.7731E 00	0.9573E 00	0.8627E 00	0.6668E 00	0.5115E 00	0.1000E 01
0.0424	0.7360E 00	0.1151E 01	0.7897E 00	0.9612E 00	0.8690E 00	0.6860E 00	0.5323E 00	0.1000E 01
0.0485	0.7503E 00	0.1145E 01	0.8030E 00	0.9652E 00	0.8734E 00	0.7011E 00	0.5496E 00	0.1000E 01
0.0545	0.7622E 00	0.1141E 01	0.8142E 00	0.9688E 00	0.8768E 00	0.7137E 00	0.5646E 00	0.1000E 01
0.0606	0.7727E 00	0.1137E 01	0.8240E 00	0.9722E 00	0.8797E 00	0.7247E 00	0.5781E 00	0.1000E 01
0.0909	0.8036E 00	0.1126E 01	0.8528E 00	0.9823E 00	0.8885E 00	0.7575E 00	0.6207E 00	0.1000E 01
0.1212	0.8216E 00	0.1115E 01	0.8676E 00	0.9844E 00	0.8974E 00	0.7783E 00	0.6473E 00	0.1000E 01
0.1515	0.8351E 00	0.1106E 01	0.8783E 00	0.9856E 00	0.9044E 00	0.7941E 00	0.6681E 00	0.1000E 01
0.1818	0.8462E 00	0.1099E 01	0.8871E 00	0.9866E 00	0.9103E 00	0.8073E 00	0.6859E 00	0.1000E 01
0.2121	0.8572E 00	0.1092E 01	0.8957E 00	0.9875E 00	0.9162E 00	0.8204E 00	0.7041E 00	0.1000E 01
0.2424	0.8660E 00	0.1086E 01	0.9026E 00	0.9883E 00	0.9210E 00	0.8311E 00	0.7191E 00	0.1000E 01
0.2727	0.8755E 00	0.1080E 01	0.9099E 00	0.9891E 00	0.9263E 00	0.8426E 00	0.7358E 00	0.1000E 01
0.3030	0.8842E 00	0.1074E 01	0.9165E 00	0.9899E 00	0.9311E 00	0.8531E 00	0.7512E 00	0.1000E 01
0.3333	0.8935E 00	0.1068E 01	0.9236E 00	0.9907E 00	0.9364E 00	0.8645E 00	0.7683E 00	0.1000E 01
0.3636	0.9019E 00	0.1063E 01	0.9299E 00	0.9915E 00	0.9411E 00	0.8749E 00	0.7843E 00	0.1000E 01
0.3939	0.9110E 00	0.1057E 01	0.9367E 00	0.9923E 00	0.9464E 00	0.8862E 00	0.8019E 00	0.1000E 01
0.4242	0.9200E 00	0.1051E 01	0.9433E 00	0.9931E 00	0.9516E 00	0.8974E 00	0.8198E 00	0.1000E 01
0.4545	0.9289E 00	0.1045E 01	0.9499E 00	0.9938E 00	0.9568E 00	0.9086E 00	0.8379E 00	0.1000E 01
0.4848	0.9377E 00	0.1040E 01	0.9563E 00	0.9946E 00	0.9620E 00	0.9197E 00	0.8563E 00	0.1000E 01
0.5152	0.9457E 00	0.1035E 01	0.9621E 00	0.9953E 00	0.9668E 00	0.9299E 00	0.8734E 00	0.1000E 01
0.5455	0.9537E 00	0.1029E 01	0.9678E 00	0.9960E 00	0.9716E 00	0.9400E 00	0.8908E 00	0.1000E 01
0.5758	0.9608E 00	0.1025E 01	0.9729E 00	0.9966E 00	0.9759E 00	0.9491E 00	0.9068E 00	0.1000E 01
0.6061	0.9672E 00	0.1021E 01	0.9774E 00	0.9972E 00	0.9798E 00	0.9574E 00	0.9213E 00	0.1000E 01
0.6364	0.9722E 00	0.1018E 01	0.9809E 00	0.9976E 00	0.9829E 00	0.9638E 00	0.9328E 00	0.1000E 01
0.6667	0.9768E 00	0.1015E 01	0.9841E 00	0.9980E 00	0.9857E 00	0.9697E 00	0.9435E 00	0.1000E 01
0.6970	0.9799E 00	0.1013E 01	0.9863E 00	0.9983E 00	0.9876E 00	0.9738E 00	0.9509E 00	0.1000E 01
0.7273	0.9834E 00	0.1011E 01	0.9887E 00	0.9986E 00	0.9898E 00	0.9783E 00	0.9593E 00	0.1000E 01
0.7576	0.9869E 00	0.1008E 01	0.9911E 00	0.9989E 00	0.9920E 00	0.9828E 00	0.9677E 00	0.1000E 01
0.7879	0.9889E 00	0.1007E 01	0.9925E 00	0.9991E 00	0.9933E 00	0.9856E 00	0.9727E 00	0.1000E 01
0.8182	0.9917E 00	0.1005E 01	0.9944E 00	0.9993E 00	0.9950E 00	0.9892E 00	0.9795E 00	0.1000E 01
0.8485	0.9934E 00	0.1004E 01	0.9956E 00	0.9995E 00	0.9961E 00	0.9914E 00	0.9837E 00	0.1000E 01
0.8788	0.9951E 00	0.1003E 01	0.9968E 00	0.9996E 00	0.9971E 00	0.9937E 00	0.9880E 00	0.1000E 01
0.9091	0.9965E 00	0.1002E 01	0.9977E 00	0.9997E 00	0.9980E 00	0.9955E 00	0.9914E 00	0.1000E 01
0.9394	0.9979E 00	0.1001E 01	0.9987E 00	0.9998E 00	0.9989E 00	0.9973E 00	0.9948E 00	0.1000E 01
0.9697	0.9992E 00	0.1000E 01	0.9996E 00	1.0000E 00	0.9997E 00	0.9991E 00	0.9983E 00	0.1000E 01
1.0000	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	1.0000E 00	1.0000E 00	0.1000E 01

TABLE IV - CONTINUED.

(c) $M_\infty = 2.58$ STATION 6 $T_w/T_\delta = 2.136$

$\delta = 1.050$ IN $M_\delta = 2.631$ $T_\delta = 238.1$ °R $U_\delta = 1990$ FT/SEC $T_{T_\delta} = 567.7$ °R

$\rho_\delta = 0.7299 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.452$ SLUGS/FT²-SEC $P_\delta = 298.25$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2136E 01	0.	0.9960E 00	0.4682E-00	0.	0.4780E-01	0.1000E 01
0.0048	0.4244E-00	0.1728E 01	0.5577E 00	0.9054E 00	0.5788E 00	0.3229E-00	0.1041E-00	0.1000E 01
0.0095	0.5022E 00	0.1616E 01	0.6382E 00	0.9142E 00	0.6190E 00	0.3952E-00	0.1363E-00	0.1000E 01
0.0143	0.5560E 00	0.1541E 01	0.6901E 00	0.9230E 00	0.6489E 00	0.4480E-00	0.1663E-00	0.1000E 01
0.0190	0.5947E 00	0.1490E 01	0.7259E 00	0.9310E 00	0.6712E 00	0.4874E-00	0.1928E-00	0.1000E 01
0.0238	0.6226E 00	0.1454E 01	0.7507E 00	0.9373E 00	0.6877E 00	0.5165E 00	0.2150E-00	0.1000E 01
0.0286	0.6452E 00	0.1426E 01	0.7704E 00	0.9428E 00	0.7013E 00	0.5405E 00	0.2350E-00	0.1000E 01
0.0333	0.6615E 00	0.1407E 01	0.7845E 00	0.9474E 00	0.7110E 00	0.5579E 00	0.2508E-00	0.1000E 01
0.0381	0.6732E 00	0.1393E 01	0.7945E 00	0.9509E 00	0.7179E 00	0.5705E 00	0.2628E-00	0.1000E 01
0.0429	0.6820E 00	0.1383E 01	0.8018E 00	0.9533E 00	0.7234E 00	0.5802E 00	0.2722E-00	0.1000E 01
0.0476	0.6901E 00	0.1374E 01	0.8087E 00	0.9559E 00	0.7281E 00	0.5890E 00	0.2813E-00	0.1000E 01
0.0714	0.7205E 00	0.1338E 01	0.8333E 00	0.9646E 00	0.7474E 00	0.6230E 00	0.3180E-00	0.1000E 01
0.0952	0.7422E 00	0.1312E 01	0.8501E 00	0.9701E 00	0.7622E 00	0.6481E 00	0.3475E-00	0.1000E 01
0.1190	0.7574E 00	0.1293E 01	0.8610E 00	0.9727E 00	0.7737E 00	0.6663E 00	0.3697E-00	0.1000E 01
0.1429	0.7677E 00	0.1279E 01	0.8682E 00	0.9744E 00	0.7817E 00	0.6789E 00	0.3857E-00	0.1000E 01
0.1667	0.7754E 00	0.1269E 01	0.8734E 00	0.9753E 00	0.7880E 00	0.6885E 00	0.3981E-00	0.1000E 01
0.1905	0.7819E 00	0.1261E 01	0.8777E 00	0.9761E 00	0.7934E 00	0.6966E 00	0.4088E-00	0.1000E 01
0.2143	0.7929E 00	0.1246E 01	0.8849E 00	0.9775E 00	0.8026E 00	0.7105E 00	0.4276E-00	0.1000E 01
0.2381	0.7994E 00	0.1238E 01	0.8891E 00	0.9782E 00	0.8081E 00	0.7188E 00	0.4392E-00	0.1000E 01
0.2619	0.8058E 00	0.1229E 01	0.8933E 00	0.9790E 00	0.8136E 00	0.7270E 00	0.4510E-00	0.1000E 01
0.2857	0.8130E 00	0.1220E 01	0.8978E 00	0.9799E 00	0.8198E 00	0.7362E 00	0.4645E-00	0.1000E 01
0.3095	0.8209E 00	0.1210E 01	0.9028E 00	0.9808E 00	0.8266E 00	0.7465E 00	0.4798E-00	0.1000E 01
0.3333	0.8295E 00	0.1199E 01	0.9081E 00	0.9818E 00	0.8342E 00	0.7578E 00	0.4971E-00	0.1000E 01
0.3571	0.8387E 00	0.1187E 01	0.9137E 00	0.9829E 00	0.8424E 00	0.7700E 00	0.5165E 00	0.1000E 01
0.3810	0.8479E 00	0.1176E 01	0.9192E 00	0.9839E 00	0.8506E 00	0.7822E 00	0.5363E 00	0.1000E 01
0.4048	0.8562E 00	0.1165E 01	0.9242E 00	0.9849E 00	0.8582E 00	0.7934E 00	0.5550E 00	0.1000E 01
0.4286	0.8652E 00	0.1154E 01	0.9294E 00	0.9859E 00	0.8664E 00	0.8055E 00	0.5760E 00	0.1000E 01
0.4524	0.8741E 00	0.1143E 01	0.9346E 00	0.9869E 00	0.8746E 00	0.8177E 00	0.5974E 00	0.1000E 01
0.4762	0.8822E 00	0.1134E 01	0.9391E 00	0.9878E 00	0.8822E 00	0.8208E 00	0.6176E 00	0.1000E 01
0.5000	0.8887E 00	0.1126E 01	0.9428E 00	0.9885E 00	0.8883E 00	0.8378E 00	0.6345E 00	0.1000E 01
0.5238	0.8967E 00	0.1116E 01	0.9473E 00	0.9894E 00	0.8959E 00	0.8489E 00	0.6556E 00	0.1000E 01
0.5476	0.9038E 00	0.1108E 01	0.9512E 00	0.9901E 00	0.9028E 00	0.8590E 00	0.6752E 00	0.1000E 01
0.5714	0.9109E 00	0.1099E 01	0.9550E 00	0.9909E 00	0.9096E 00	0.8690E 00	0.6951E 00	0.1000E 01
0.5952	0.9180E 00	0.1091E 01	0.9588E 00	0.9917E 00	0.9165E 00	0.8790E 00	0.7155E 00	0.1000E 01
0.6190	0.9243E 00	0.1084E 01	0.9621E 00	0.9923E 00	0.9226E 00	0.8880E 00	0.7343E 00	0.1000E 01
0.6429	0.9305E 00	0.1077E 01	0.9654E 00	0.9930E 00	0.9288E 00	0.8970E 00	0.7533E 00	0.1000E 01
0.6667	0.9367E 00	0.1070E 01	0.9687E 00	0.9936E 00	0.9350E 00	0.9060E 00	0.7728E 00	0.1000E 01
0.6905	0.9436E 00	0.1062E 01	0.9722E 00	0.9943E 00	0.9418E 00	0.9159E 00	0.7947E 00	0.1000E 01
0.7143	0.9497E 00	0.1055E 01	0.9753E 00	0.9950E 00	0.9480E 00	0.9249E 00	0.8149E 00	0.1000E 01
0.7381	0.9558E 00	0.1048E 01	0.9784E 00	0.9956E 00	0.9541E 00	0.9338E 00	0.8354E 00	0.1000E 01
0.7619	0.9618E 00	0.1041E 01	0.9814E 00	0.9962E 00	0.9603E 00	0.9428E 00	0.8563E 00	0.1000E 01
0.7857	0.9672E 00	0.1036E 01	0.9840E 00	0.9968E 00	0.9658E 00	0.9507E 00	0.8752E 00	0.1000E 01
0.8095	0.9711E 00	0.1031E 01	0.9860E 00	0.9972E 00	0.9699E 00	0.9566E 00	0.8896E 00	0.1000E 01
0.8333	0.9758E 00	0.1026E 01	0.9883E 00	0.9976E 00	0.9747E 00	0.9636E 00	0.9065E 00	0.1000E 01
0.8571	0.9804E 00	0.1021E 01	0.9905E 00	0.9981E 00	0.9795E 00	0.9705E 00	0.9237E 00	0.1000E 01
0.8810	0.9843E 00	0.1017E 01	0.9924E 00	0.9985E 00	0.9836E 00	0.9764E 00	0.9386E 00	0.1000E 01
0.9048	0.9882E 00	0.1013E 01	0.9943E 00	0.9989E 00	0.9877E 00	0.9824E 00	0.9537E 00	0.1000E 01
0.9286	0.9908E 00	0.1010E 01	0.9955E 00	0.9991E 00	0.9904E 00	0.9863E 00	0.9639E 00	0.1000E 01
0.9524	0.9934E 00	0.1007E 01	0.9967E 00	0.9994E 00	0.9932E 00	0.9903E 00	0.9741E 00	0.1000E 01
0.9762	0.9966E 00	0.1004E 01	0.9982E 00	0.9997E 00	0.9966E 00	0.9952E 00	0.9870E 00	0.1000E 01
1.0000	0.9999E 00	0.1000E 01	0.9998E 00	1.0000E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01

TABLE IV - CONTINUED.

(d) $M_\infty = 2.58$ STATION 8 $T_w/T_\delta = 2.132$

$\delta = 1.025$ IN $M_\delta = 2.625$ $T_\delta = 236.5$ °R $U_\delta = 1978$ FT/SEC $T_{T_\delta} = 562.4$ °R

$\rho_\delta = 0.7408 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.465$ SLUGS/FT²-SEC $P_\delta = 300.65$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2132E 01	0.	0.8967E 00	0.4690E-00	0.	0.4825E-01	0.1000E 01
0.0049	0.4195E-00	0.1721E 01	0.5505E 00	0.8994E 00	0.5810E 00	0.3199E-00	0.1031E-00	0.1000E 01
0.0098	0.5034E 00	0.1592E 01	0.6354E 00	0.9034E 00	0.6280E 00	0.3991E-00	0.1376E-00	0.1000E 01
0.0146	0.5404E 00	0.1539E 01	0.6706E 00	0.9079E 00	0.6496E 00	0.4357E-00	0.1576E-00	0.1000E 01
0.0195	0.5786E 00	0.1489E 01	0.7063E 00	0.9152E 00	0.6715E 00	0.4743E-00	0.1820E-00	0.1000E 01
0.0244	0.6065E 00	0.1453E 01	0.7312E 00	0.9206E 00	0.6884E 00	0.5035E 00	0.2027E-00	0.1000E 01
0.0293	0.6276E 00	0.1426E 01	0.7495E 00	0.9249E 00	0.7015E 00	0.5259E 00	0.2200E-00	0.1000E 01
0.0341	0.6421E 00	0.1407E 01	0.7619E 00	0.9281E 00	0.7105E 00	0.5415E 00	0.2330E-00	0.1000E 01
0.0390	0.6571E 00	0.1388E 01	0.7743E 00	0.9311E 00	0.7204E 00	0.5580E 00	0.2472E-00	0.1000E 01
0.0439	0.6670E 00	0.1376E 01	0.7827E 00	0.9337E 00	0.7266E 00	0.5688E 00	0.2572E-00	0.1000E 01
0.0488	0.6759E 00	0.1365E 01	0.7900E 00	0.9357E 00	0.7324E 00	0.5787E 00	0.2665E-00	0.1000E 01
0.0732	0.7080E 00	0.1329E 01	0.8164E 00	0.9449E 00	0.7525E 00	0.6145E 00	0.3032E-00	0.1000E 01
0.0976	0.7306E 00	0.1304E 01	0.8346E 00	0.9518E 00	0.7668E 00	0.6401E 00	0.3323E-00	0.1000E 01
0.1220	0.7494E 00	0.1282E 01	0.8489E 00	0.9567E 00	0.7798E 00	0.6621E 00	0.3587E-00	0.1000E 01
0.1463	0.7651E 00	0.1264E 01	0.8603E 00	0.9602E 00	0.7912E 00	0.6809E 00	0.3824E-00	0.1000E 01
0.1707	0.7768E 00	0.1250E 01	0.8686E 00	0.9625E 00	0.8002E 00	0.6952E 00	0.4011E-00	0.1000E 01
0.1951	0.7876E 00	0.1238E 01	0.8765E 00	0.9654E 00	0.8080E 00	0.7083E 00	0.4193E-00	0.1000E 01
0.2195	0.7993E 00	0.1226E 01	0.8851E 00	0.9692E 00	0.8159E 00	0.7223E 00	0.4399E-00	0.1000E 01
0.2439	0.8089E 00	0.1216E 01	0.8923E 00	0.9728E 00	0.8221E 00	0.7338E 00	0.4576E-00	0.1000E 01
0.2683	0.8168E 00	0.1209E 01	0.8984E 00	0.9761E 00	0.8270E 00	0.7431E 00	0.4727E-00	0.1000E 01
0.2927	0.8246E 00	0.1202E 01	0.9044E 00	0.9793E 00	0.8318E 00	0.7525E 00	0.4881E-00	0.1000E 01
0.3171	0.8332E 00	0.1194E 01	0.9107E 00	0.9827E 00	0.8373E 00	0.7628E 00	0.5055E 00	0.1000E 01
0.3415	0.8408E 00	0.1188E 01	0.9165E 00	0.9859E 00	0.8421E 00	0.7720E 00	0.5217E 00	0.1000E 01
0.3659	0.8485E 00	0.1181E 01	0.9222E 00	0.9892E 00	0.8469E 00	0.7812E 00	0.5383E 00	0.1000E 01
0.3902	0.8552E 00	0.1175E 01	0.9273E 00	0.9923E 00	0.8510E 00	0.7893E 00	0.5535E 00	0.1000E 01
0.4146	0.8649E 00	0.1163E 01	0.9330E 00	0.9934E 00	0.8598E 00	0.8024E 00	0.5760E 00	0.1000E 01
0.4390	0.8716E 00	0.1155E 01	0.9369E 00	0.9941E 00	0.8659E 00	0.8114E 00	0.5920E 00	0.1000E 01
0.4634	0.8804E 00	0.1144E 01	0.9420E 00	0.9951E 00	0.8740E 00	0.8235E 00	0.6138E 00	0.1000E 01
0.4878	0.8877E 00	0.1135E 01	0.9461E 00	0.9959E 00	0.8808E 00	0.8335E 00	0.6324E 00	0.1000E 01
0.5122	0.8963E 00	0.1125E 01	0.9509E 00	0.9969E 00	0.8889E 00	0.8454E 00	0.6552E 00	0.1000E 01
0.5366	0.9049E 00	0.1115E 01	0.9556E 00	0.9978E 00	0.8970E 00	0.8574E 00	0.6786E 00	0.1000E 01
0.5610	0.9119E 00	0.1106E 01	0.9595E 00	0.9986E 00	0.9038E 00	0.8674E 00	0.6986E 00	0.1000E 01
0.5854	0.9183E 00	0.1099E 01	0.9629E 00	0.9992E 00	0.9099E 00	0.8763E 00	0.7169E 00	0.1000E 01
0.6098	0.9245E 00	0.1091E 01	0.9659E 00	0.9991E 00	0.9167E 00	0.8856E 00	0.7355E 00	0.1000E 01
0.6341	0.9314E 00	0.1082E 01	0.9691E 00	0.9991E 00	0.9242E 00	0.8958E 00	0.7566E 00	0.1000E 01
0.6585	0.9369E 00	0.1075E 01	0.9716E 00	0.9989E 00	0.9303E 00	0.9041E 00	0.7738E 00	0.1000E 01
0.6829	0.9431E 00	0.1066E 01	0.9741E 00	0.9980E 00	0.9379E 00	0.9137E 00	0.7935E 00	0.1000E 01
0.7073	0.9492E 00	0.1059E 01	0.9768E 00	0.9979E 00	0.9447E 00	0.9230E 00	0.8136E 00	0.1000E 01
0.7317	0.9546E 00	0.1052E 01	0.9792E 00	0.9977E 00	0.9509E 00	0.9312E 00	0.8317E 00	0.1000E 01
0.7561	0.9599E 00	0.1045E 01	0.9815E 00	0.9974E 00	0.9570E 00	0.9395E 00	0.8501E 00	0.1000E 01
0.7805	0.9653E 00	0.1038E 01	0.9838E 00	0.9972E 00	0.9632E 00	0.9478E 00	0.8687E 00	0.1000E 01
0.8049	0.9712E 00	0.1031E 01	0.9863E 00	0.9971E 00	0.9701E 00	0.9570E 00	0.8901E 00	0.1000E 01
0.8293	0.9771E 00	0.1024E 01	0.9892E 00	0.9977E 00	0.9762E 00	0.9659E 00	0.9119E 00	0.1000E 01
0.8537	0.9824E 00	0.1019E 01	0.9918E 00	0.9982E 00	0.9816E 00	0.9738E 00	0.9315E 00	0.1000E 01
0.8780	0.9863E 00	0.1015E 01	0.9937E 00	0.9986E 00	0.9857E 00	0.9797E 00	0.9464E 00	0.1000E 01
0.9024	0.9902E 00	0.1010E 01	0.9955E 00	0.9990E 00	0.9898E 00	0.9856E 00	0.9615E 00	0.1000E 01
0.9268	0.9928E 00	0.1008E 01	0.9968E 00	0.9992E 00	0.9925E 00	0.9895E 00	0.9717E 00	0.1000E 01
0.9512	0.9954E 00	0.1005E 01	0.9980E 00	0.9995E 00	0.9952E 00	0.9934E 00	0.9819E 00	0.1000E 01
0.9756	0.9979E 00	0.1002E 01	0.9992E 00	0.9997E 00	0.9979E 00	0.9974E 00	0.9922E 00	0.1000E 01
1.0000	0.9999E 00	0.1000E 01	0.1000E 01	0.9999E 00	1.0000E 00	0.1000E 01	1.0000E 00	0.1000E 01

TABLE IV - CONTINUED.

(e) $M_\infty = 2.58$ STATION 12 $T_w/T_\delta = 2.164$

$\delta = 0.975$ IN $M_\delta = 2.634$ $T_\delta = 235.7$ °R $U_\delta = 1982$ FT/SEC $T_{T_\delta} = 562.9$ °R

$\rho_\delta = 0.8360 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.657$ SLUGS/FT²-SEC $P_\delta = 338.16$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2165E 01	0.	0.9064E 00	0.4620E-C0	0.	0.4754E-01	0.1000E 01
0.0051	0.4431E-00	0.1712E 01	0.5796E CC	0.9119E 0C	0.5843E 00	C.3387E-00	0.1104E-00	0.1000E 01
0.0103	0.4892E-00	0.1644E 01	0.6273E 00	0.9172E 00	0.6082E C0	0.3815E-00	0.1297E-00	0.1000E 01
0.0154	0.5271E 00	0.1590E 01	0.6648E 00	0.9228E 00	0.6288E 00	0.4180E-00	0.1488E-00	0.1000E 01
0.0205	0.5560E 00	0.1552E 01	0.6927E 00	0.9286E 00	0.6444E 00	0.4464E-00	0.1658E-00	0.1000E 01
0.0256	0.5793E 00	0.1520E 01	0.7143E 0C	0.9331E 0C	0.6578E C0	0.4699E-00	0.1812E-00	0.1000E 01
0.0308	0.5976E 00	0.1497E 01	0.7311E 00	0.9373E 00	0.6682E C0	0.4885E-00	0.1944E-00	0.1000E 01
0.0359	0.6127E 00	0.1477E 01	0.7445E 00	0.9405E 00	0.6772E 00	0.5042E 00	0.2062E-00	0.1000E 01
0.0410	0.6239E 00	0.1463E 01	0.7547E 00	0.9436E 00	0.6835E 00	C.5158E 00	0.2155E-00	0.1000E 01
0.0462	0.6332E 00	0.1452E 01	0.7628E CC	0.9459E 00	0.6890E 00	0.5256E 00	0.2235E-00	0.1000E 01
0.0513	0.6418E 00	0.1441E 01	0.7703E 00	0.9481E 00	0.6941E 00	0.5347E 00	0.2312E-00	0.1000E 01
0.0769	0.6754E 00	0.1399E 01	0.7987E 00	0.9563E 00	0.7151E 00	0.5712E 00	0.2645E-00	0.1000E 01
0.1026	0.7020E 00	0.1364E 01	0.8199E 00	0.9619E 00	0.7331E C0	C.6010E 00	0.2944E-00	0.1000E 01
0.1282	0.7229E 00	0.1338E 01	0.8362E 00	0.9666E 0C	0.7474E C0	C.6249E 00	0.3205E-00	0.1000E 01
0.1538	0.7400E 00	0.1315E 01	0.8487E 00	0.9693E 00	0.7603E C0	0.6453E 00	0.3437E-00	0.1000E 01
0.1795	0.7563E 00	0.1295E 01	0.8607E 00	0.9728E 00	0.7721E 00	0.6645E 00	0.3674E-00	0.1000E 01
0.2051	0.7694E 00	0.1278E 01	0.8697E 00	0.9745E 0C	0.7828E C0	C.6807E 00	0.3877E-00	0.1000E 01
0.2308	0.7814E 00	0.1262E 01	0.8777E 00	0.9759E 00	0.7926E 00	0.6956E 00	0.4072E-00	0.1000E 01
0.2564	0.7936E 00	0.1246E 01	0.8857E 00	0.9774E 00	0.8029E C0	0.7111E 00	0.4282E-00	0.1000E 01
0.2821	0.8049E 00	0.1231E 01	0.893CE 00	0.9788E 00	0.8125E 00	0.7255E 00	0.4486E-00	0.1000E 01
0.3077	0.8153E 00	0.1217E 01	0.8996E CC	0.980CE 0C	0.8215E 00	C.7389E 00	0.4682E-00	0.1000E C1
0.3333	0.8256E 00	0.1204E 01	0.906CE 00	0.9812E 00	0.8304E C0	0.7523E 00	0.4885E-00	0.1000E 01
0.3590	0.8357E 00	0.1191E 01	0.9122E 00	0.9824E 00	0.8394E 00	0.7657E 00	0.5093E 00	0.1000E 01
0.3846	0.8443E 00	0.1181E 01	0.9174E 00	0.9834E 00	0.8471E 00	0.7771E 00	0.5277E 00	0.1000E 01
0.4103	0.8528E 00	0.1170E 01	0.9225E C0	0.9844E 00	0.8548E C0	C.7885E 00	0.5465E 00	0.1000E 01
0.4359	0.8620E 00	0.1159E 01	0.9278E 00	0.9854E 00	0.8631E C0	C.8008E 00	0.5675E 00	0.1000E 01
0.4615	0.8710E 00	0.1148E 01	0.933CE 00	0.9864E 00	0.8714E 00	0.8130E 00	0.5890E 00	0.1000E 01
0.4872	0.8792E 00	0.1138E 01	0.9377E 00	0.9874E 00	0.8791E 00	0.8243E 00	0.6093E 00	0.1000E 01
0.5128	0.8874E 00	0.1128E 01	0.9423E 0C	0.9883E 00	0.8868E C0	C.8356E 00	0.6302E 00	0.1000E 01
0.5385	0.8955E 00	0.1118E 01	0.9469E 00	0.9892E 0C	0.8945E C0	0.8469E 00	0.6516E 00	0.1000E 01
0.5641	0.9035E 00	0.1109E 01	0.9513E 00	0.990CE 00	0.9021E 00	0.8582E 00	0.6735E 00	0.1000E 01
0.5897	0.9108E 00	0.1100E 01	0.9552E 00	0.9908E 00	0.9092E C0	0.8684E 00	0.6939E 00	0.1000E 01
0.6154	C.9193E 00	0.1090E 01	0.9598E CC	0.9917E 00	0.9175E C0	C.8806E 00	0.7187E 00	0.1000E 01
0.6410	0.9272E 00	0.1081E 01	0.9639E 00	0.9926E 0C	0.9252E C0	0.8918E 00	0.7422E 00	0.1000E 01
0.6667	0.9336E 00	0.1074E 01	C.9673E 00	0.9932E 00	0.9316E 00	0.9011E 00	0.7621E 00	0.1000E 01
0.6923	0.9394E 00	0.1067E 01	0.9703E 00	0.9938E 00	0.9373E 00	0.9094E 00	0.7804E 00	0.1000E 01
0.7179	0.9464E 00	0.1059E 01	0.9739E C0	0.9946E 0C	0.9443E C0	0.9197E 00	0.8031E 00	0.1000E 01
0.7436	0.9521E 00	0.1053E 01	0.9768E 00	0.9952E CC	0.9501E C0	0.9280E 00	0.8221E 00	0.1000E 01
0.7692	0.9584E 00	0.1046E 01	0.9799E 00	0.9958E 0C	0.9565E C0	0.9373E 00	0.8435E 00	0.1000E 01
0.7949	0.9640E 00	0.1039E 01	0.9827E 00	0.9964E 00	0.9622E C0	C.9456E 00	0.8632E 00	0.1000E 01
0.8205	0.9702E 00	0.1032E 01	0.9858E CC	0.9970E 0C	0.9686E C0	C.9549E 00	0.8854E 00	0.1000E 01
0.8462	0.9764E 00	0.1026E 01	0.9888E 00	0.9976E 00	0.9750E C0	0.9641E 00	0.908CE 00	0.1000E 01
0.8718	0.9813E 00	0.1020E 01	0.9912E 00	0.9981L 00	0.9801E C0	0.9715E 00	0.9263E 00	0.1000E 01
0.8974	0.9862E 00	0.1015E 01	0.9935E 00	0.9986E CC	0.9853E C0	C.9788E 00	0.9450E 00	0.1000E 01
0.9231	0.9904E 00	0.1010E C1	0.9955E C0	0.9990E CC	0.9897E C0	0.9853E 00	0.9615E 00	0.1000E C1
0.9487	0.9935E 00	0.1007E 01	0.997CE 00	0.9993E 0C	0.9929E C0	0.9899E 00	0.9734E 00	0.1000E 01
0.9744	0.9971E 00	0.1003E 01	C.9987E 00	0.9997E 00	0.9968E 00	0.9954E 00	0.9879E 00	0.1000E 01
1.0000	0.1000E 01	0.1000E 01	0.1000E C1	1.000CE 0C	1.0000E C0	C.1000E 01	0.1000E 01	0.1000E 01

TABLE IV - CONTINUED.

(f) $M_\infty = 2.58$ STATION 14 $T_w/T_\delta = 2.125$
$\delta = 1.075$ IN $M_\delta = 2.616$ $T_\delta = 238.4$ °R $U_\delta = 1980$ FT/SEC $T_{T_\delta} = 564.7$ °R
$\rho_\delta = 0.8514 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.686$ SLUGS/FT² - SEC $P_\delta = 348.24$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2126E 01	0.	0.8975E 00	0.4703E-00	0.	0.4887E-01	0.1000E 01
0.0047	0.3776E-00	0.1791E 01	0.5052E 00	0.9035E 00	0.5584E 00	0.2820E-00	0.9120E-01	0.1000E 01
0.0093	0.4466E-00	0.1692E 01	0.5809E 00	0.9096E 00	0.5907E 00	0.3431E-00	0.1137E-00	0.1000E 01
0.0140	0.4954E-00	0.1623E 01	0.6310E 00	0.9154E 00	0.6160E 00	0.3887E-00	0.1346E-00	0.1000E 01
0.0186	0.5324E 00	0.1574E 01	0.6679E 00	0.9224E 00	0.6351E 00	0.4241E-00	0.1539E-00	0.1000E 01
0.0233	0.5601E 00	0.1537E 01	0.6943E 00	0.9275E 00	0.6505E 00	0.4516E-00	0.1706E-00	0.1000E 01
0.0279	0.5810E 00	0.1510E 01	0.7138E 00	0.9321E 00	0.6621E 00	0.4725E-00	0.1846E-00	0.1000E 01
0.0326	0.5979E 00	0.1488E 01	0.7292E 00	0.9357E 00	0.6718E 00	0.4898E-00	0.1969E-00	0.1000E 01
0.0372	0.6109E 00	0.1472E 01	0.7410E 00	0.9387E 00	0.6794E 00	0.5033E 00	0.2071E-00	0.1000E 01
0.0419	0.6224E 00	0.1457E 01	0.7512E 00	0.9415E 00	0.6860E 00	0.5153E 00	0.2165E-00	0.1000E 01
0.0465	0.6319E 00	0.1446E 01	0.7596E 00	0.9439E 00	0.6916E 00	0.5253E 00	0.2247E-00	0.1000E 01
0.0698	0.6698E 00	0.1399E 01	0.7920E 00	0.9531E 00	0.7148E 00	0.5660E 00	0.2610E-00	0.1000E 01
0.0930	0.6981E 00	0.1362E 01	0.8147E 00	0.9588E 00	0.7339E 00	0.5978E 00	0.2923E-00	0.1000E 01
0.1163	0.7212E 00	0.1335E 01	0.8331E 00	0.9648E 00	0.7490E 00	0.6239E 00	0.3207E-00	0.1000E 01
0.1395	0.7408E 00	0.1312E 01	0.8483E 00	0.9698E 00	0.7622E 00	0.6465E 00	0.3472E-00	0.1000E 01
0.1628	0.7576E 00	0.1291E 01	0.8607E 00	0.9734E 00	0.7743E 00	0.6664E 00	0.3717E-00	0.1000E 01
0.1860	0.7741E 00	0.1269E 01	0.8720E 00	0.9754E 00	0.7877E 00	0.6868E 00	0.3976E-00	0.1000E 01
0.2093	0.7875E 00	0.1252E 01	0.8809E 00	0.9770E 00	0.7987E 00	0.7035E 00	0.4198E-00	0.1000E 01
0.2326	0.8009E 00	0.1234E 01	0.8896E 00	0.9786E 00	0.8100E 00	0.7205E 00	0.4434E-00	0.1000E 01
0.2558	0.8126E 00	0.1219E 01	0.8971E 00	0.9800E 00	0.8200E 00	0.7355E 00	0.4652E-00	0.1000E 01
0.2791	0.8234E 00	0.1205E 01	0.9039E 00	0.9812E 00	0.8294E 00	0.7496E 00	0.4863E-00	0.1000E 01
0.3023	0.8341E 00	0.1192E 01	0.9105E 00	0.9824E 00	0.8388E 00	0.7636E 00	0.5080E 00	0.1000E 01
0.3256	0.8447E 00	0.1179E 01	0.9169E 00	0.9837E 00	0.8482E 00	0.7776E 00	0.5305E 00	0.1000E 01
0.3488	0.8544E 00	0.1167E 01	0.9227E 00	0.9848E 00	0.8569E 00	0.7906E 00	0.5520E 00	0.1000E 01
0.3721	0.8634E 00	0.1156E 01	0.9280E 00	0.9858E 00	0.8650E 00	0.8027E 00	0.5726E 00	0.1000E 01
0.3953	0.8715E 00	0.1146E 01	0.9327E 00	0.9867E 00	0.8725E 00	0.8138E 00	0.5921E 00	0.1000E 01
0.4186	0.8796E 00	0.1136E 01	0.9374E 00	0.9876E 00	0.8800E 00	0.8248E 00	0.6120E 00	0.1000E 01
0.4419	0.8870E 00	0.1127E 01	0.9415E 00	0.9884E 00	0.8869E 00	0.8350E 00	0.6307E 00	0.1000E 01
0.4651	0.8943E 00	0.1119E 01	0.9456E 00	0.9892E 00	0.8938E 00	0.8451E 00	0.6498E 00	0.1000E 01
0.4884	0.9015E 00	0.1110E 01	0.9496E 00	0.9899E 00	0.9007E 00	0.8552E 00	0.6694E 00	0.1000E 01
0.5116	0.9087E 00	0.1102E 01	0.9536E 00	0.9907E 00	0.9076E 00	0.8653E 00	0.6893E 00	0.1000E 01
0.5349	0.9152E 00	0.1094E 01	0.9571E 00	0.9914E 00	0.9138E 00	0.8745E 00	0.7078E 00	0.1000E 01
0.5581	0.9222E 00	0.1086E 01	0.9608E 00	0.9921E 00	0.9207E 00	0.8845E 00	0.7285E 00	0.1000E 01
0.5814	0.9292E 00	0.1078E 01	0.9646E 00	0.9929E 00	0.9276E 00	0.8946E 00	0.7496E 00	0.1000E 01
0.6047	0.9356E 00	0.1071E 01	0.9679E 00	0.9935E 00	0.9338E 00	0.9037E 00	0.7692E 00	0.1000E 01
0.6279	0.9418E 00	0.1064E 01	0.9711E 00	0.9942E 00	0.9400E 00	0.9128E 00	0.7892E 00	0.1000E 01
0.6512	0.9475E 00	0.1057E 01	0.9740E 00	0.9948E 00	0.9457E 00	0.9210E 00	0.8075E 00	0.1000E 01
0.6744	0.9524E 00	0.1052E 01	0.9765E 00	0.9953E 00	0.9507E 00	0.9282E 00	0.8240E 00	0.1000E 01
0.6977	0.9580E 00	0.1046E 01	0.9794E 00	0.9958E 00	0.9563E 00	0.9364E 00	0.8428E 00	0.1000E 01
0.7209	0.9623E 00	0.1041E 01	0.9815E 00	0.9963E 00	0.9607E 00	0.9428E 00	0.8577E 00	0.1000E 01
0.7442	0.9666E 00	0.1036E 01	0.9836E 00	0.9967E 00	0.9650E 00	0.9491E 00	0.8727E 00	0.1000E 01
0.7674	0.9714E 00	0.1031E 01	0.9860E 00	0.9972E 00	0.9700E 00	0.9564E 00	0.8902E 00	0.1000E 01
0.7907	0.9757E 00	0.1026E 01	0.9881E 00	0.9976E 00	0.9744E 00	0.9627E 00	0.9056E 00	0.1000E 01
0.8140	0.9801E 00	0.1021E 01	0.9903E 00	0.9981E 00	0.9790E 00	0.9694E 00	0.9222E 00	0.1000E 01
0.8372	0.9843E 00	0.1017E 01	0.9923E 00	0.9985E 00	0.9834E 00	0.9757E 00	0.9380E 00	0.1000E 01
0.8605	0.9871E 00	0.1014E 01	0.9937E 00	0.9987E 00	0.9862E 00	0.9799E 00	0.9486E 00	0.1000E 01
0.8837	0.9907E 00	0.1010E 01	0.9954E 00	0.9991E 00	0.9900E 00	0.9853E 00	0.9624E 00	0.1000E 01
0.9070	0.9927E 00	0.1008E 01	0.9963E 00	0.9993E 00	0.9921E 00	0.9883E 00	0.9703E 00	0.1000E 01
0.9302	0.9954E 00	0.1005E 01	0.9976E 00	0.9996E 00	0.9950E 00	0.9925E 00	0.9811E 00	0.1000E 01
0.9535	0.9968E 00	0.1003E 01	0.9983E 00	0.9997E 00	0.9965E 00	0.9947E 00	0.9867E 00	0.1000E 01
0.9767	0.9984E 00	0.1002E 01	0.9990E 00	0.9998E 00	0.9981E 00	0.9970E 00	0.9929E 00	0.1000E 01
1.0000	0.1000E 01	0.9999E 00	0.9999E 00	0.1000E 01	1.0000E 00	0.9997E 00	0.1000E 01	0.1000E 01

TABLE IV - CONTINUED.

(g) M_∞ = 3.30 STATION 10 T_w/T_δ = 2.873

δ = 1.000 IN M_δ = 3.277 T_δ = 179.1 °R U_δ = 2149 FT/SEC T_{T_δ} = 563.7 °R

ρ_δ = 0.4246 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 0.9119 SLUGS/FT²-SEC P_δ = 130.41 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2873E 01	0.	0.9130E 00	0.3481E-00	0.	0.1808E-01	0.1000E 01
0.0050	0.3522E-00	0.2327E 01	0.5373E 00	0.9361E 00	0.4299E-00	0.2309E-00	0.4131E-01	0.1000E 01
0.0100	0.4287E-00	0.2117E 01	0.6239E 00	0.9383E 00	0.4724E-00	0.2947E-00	0.5793E-01	0.1000E 01
0.0150	0.4803E-00	0.1980E 01	0.6759E 00	0.9406E 00	0.5052E 00	0.3414E-00	0.7394E-01	0.1000E 01
0.0200	0.5086E 00	0.1907E 01	0.7025E 00	0.9425E 00	0.5245E 00	0.3684E-00	0.8489E-01	0.1000E 01
0.0250	0.5341E 00	0.1843E 01	0.7252E 00	0.9443E 00	0.5427E 00	0.3935E-00	0.9628E-01	0.1000E 01
0.0300	0.5549E 00	0.1792E 01	0.7429E 00	0.9457E 00	0.5582E 00	0.4146E-00	0.1068E-00	0.1000E 01
0.0350	0.5721E 00	0.1751E 01	0.7571E 00	0.9473E 00	0.5712E 00	0.4324E-00	0.1165E-00	0.1000E 01
0.0400	0.5867E 00	0.1717E 01	0.7689E 00	0.9487E 00	0.5826E 00	0.4479E-00	0.1255E-00	0.1000E 01
0.0450	0.5998E 00	0.1687E 01	0.7792E 00	0.9502E 00	0.5929E 00	0.4619E-00	0.1341E-00	0.1000E 01
0.0500	0.6119E 00	0.1660E 01	0.7884E 00	0.9514E 00	0.6026E 00	0.4750E-00	0.1426E-00	0.1000E 01
0.0750	0.6542E 00	0.1569E 01	0.8197E 00	0.9570E 00	0.6372E 00	0.5223E 00	0.1771E-00	0.1000E 01
0.1000	0.6847E 00	0.1508E 01	0.8410E 00	0.9617E 00	0.6631E 00	0.5577E 00	0.2071E-00	0.1000E 01
0.1250	0.7090E 00	0.1461E 01	0.8571E 00	0.9653E 00	0.6846E 00	0.5867E 00	0.2345E-00	0.1000E 01
0.1500	0.7308E 00	0.1420E 01	0.8709E 00	0.9684E 00	0.7045E 00	0.6135E 00	0.2622E-00	0.1000E 01
0.1750	0.7511E 00	0.1382E 01	0.8832E 00	0.9712E 00	0.7236E 00	0.6390E 00	0.2908E-00	0.1000E 01
0.2000	0.7641E 00	0.1359E 01	0.8908E 00	0.9730E 00	0.7361E 00	0.6556E 00	0.3108E-00	0.1000E 01
0.2250	0.7769E 00	0.1336E 01	0.8981E 00	0.9747E 00	0.7485E 00	0.6722E 00	0.3317E-00	0.1000E 01
0.2500	0.7876E 00	0.1317E 01	0.9041E 00	0.9762E 00	0.7593E 00	0.6864E 00	0.3504E-00	0.1000E 01
0.2750	0.7974E 00	0.1300E 01	0.9095E 00	0.9774E 00	0.7691E 00	0.6994E 00	0.3681E-00	0.1000E 01
0.3000	0.8082E 00	0.1282E 01	0.9153E 00	0.9788E 00	0.7801E 00	0.7139E 00	0.3888E-00	0.1000E 01
0.3250	0.8197E 00	0.1263E 01	0.9213E 00	0.9803E 00	0.7920E 00	0.7296E 00	0.4121E-00	0.1000E 01
0.3500	0.8268E 00	0.1251E 01	0.9250E 00	0.9811E 00	0.7994E 00	0.7394E 00	0.4272E-00	0.1000E 01
0.3750	0.8353E 00	0.1237E 01	0.9293E 00	0.9822E 00	0.8083E 00	0.7511E 00	0.4457E-00	0.1000E 01
0.4000	0.8437E 00	0.1224E 01	0.9335E 00	0.9832E 00	0.8172E 00	0.7628E 00	0.4649E-00	0.1000E 01
0.4250	0.8533E 00	0.1208E 01	0.9382E 00	0.9844E 00	0.8276E 00	0.7764E 00	0.4879E-00	0.1000E 01
0.4500	0.8669E 00	0.1187E 01	0.9447E 00	0.9860E 00	0.8425E 00	0.7959E 00	0.5223E 00	0.1000E 01
0.4750	0.8763E 00	0.1173E 01	0.9491E 00	0.9871E 00	0.8529E 00	0.8094E 00	0.5473E 00	0.1000E 01
0.5000	0.8870E 00	0.1156E 01	0.9540E 00	0.9883E 00	0.8649E 00	0.8249E 00	0.5770E 00	0.1000E 01
0.5250	0.8962E 00	0.1143E 01	0.9581E 00	0.9893E 00	0.8752E 00	0.8385E 00	0.6038E 00	0.1000E 01
0.5500	0.9065E 00	0.1127E 01	0.9627E 00	0.9905E 00	0.8871E 00	0.8540E 00	0.6356E 00	0.1000E 01
0.5750	0.9155E 00	0.1114E 01	0.9666E 00	0.9914E 00	0.8975E 00	0.8675E 00	0.6644E 00	0.1000E 01
0.6000	0.9257E 00	0.1100E 01	0.9710E 00	0.9925E 00	0.9094E 00	0.8829E 00	0.6984E 00	0.1000E 01
0.6250	0.9370E 00	0.1084E 01	0.9757E 00	0.9937E 00	0.9228E 00	0.9002E 00	0.7381E 00	0.1000E 01
0.6500	0.9470E 00	0.1070E 01	0.9797E 00	0.9948E 00	0.9346E 00	0.9156E 00	0.7748E 00	0.1000E 01
0.6750	0.9568E 00	0.1057E 01	0.9837E 00	0.9958E 00	0.9465E 00	0.9310E 00	0.8127E 00	0.1000E 01
0.7000	0.9641E 00	0.1047E 01	0.9866E 00	0.9965E 00	0.9554E 00	0.9425E 00	0.8420E 00	0.1000E 01
0.7250	0.9690E 00	0.1040E 01	0.9885E 00	0.9970E 00	0.9614E 00	0.9502E 00	0.8619E 00	0.1000E 01
0.7500	0.9745E 00	0.1033E 01	0.9906E 00	0.9976E 00	0.9682E 00	0.9590E 00	0.8853E 00	0.1000E 01
0.7750	0.9798E 00	0.1026E 01	0.9926E 00	0.9981E 00	0.9747E 00	0.9675E 00	0.9080E 00	0.1000E 01
0.8000	0.9833E 00	0.1021E 01	0.9940E 00	0.9985E 00	0.9792E 00	0.9732E 00	0.9238E 00	0.1000E 01
0.8250	0.9857E 00	0.1018E 01	0.9949E 00	0.9987E 00	0.9822E 00	0.9771E 00	0.9345E 00	0.1000E 01
0.8500	0.9881E 00	0.1015E 01	0.9958E 00	0.9989E 00	0.9852E 00	0.9809E 00	0.9452E 00	0.1000E 01
0.8750	0.9917E 00	0.1011E 01	0.9971E 00	0.9993E 00	0.9896E 00	0.9866E 00	0.9614E 00	0.1000E 01
0.9000	0.9952E 00	0.1006E 01	0.9984E 00	0.9996E 00	0.9941E 00	0.9924E 00	0.9778E 00	0.1000E 01
0.9250	0.9964E 00	0.1005E 01	0.9988E 00	0.9997E 00	0.9956E 00	0.9943E 00	0.9833E 00	0.1000E 01
0.9500	0.9975E 00	0.1003E 01	0.9992E 00	0.9998E 00	0.9971E 00	0.9962E 00	0.9888E 00	0.1000E 01
0.9750	0.9987E 00	0.1002E 01	0.9997E 00	0.9999E 00	0.9985E 00	0.9981E 00	0.9944E 00	0.1000E 01
1.0000	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	1.0000E 00	0.1000E 01

TABLE IV - CONTINUED.

(h) $M_\infty = 3.30$ STATION 12 $T_w/T_\delta = 2.932$

$\delta = 1.025$ IN $M_\delta = 3.309$ $T_\delta = 177.1$ °R $U_\delta = 2158$ FT/SEC $T_{T_\delta} = 564.9$ °R

$\rho_\delta = 0.4387 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.9468$ SLUGS/FT²-SEC $P_\delta = 133.31$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2933E 01	0.	0.9194E 00	0.3488E-00	0.	0.1765E-01	0.1023E 01
0.0049	0.3856E-00	0.2246E 01	0.5779E 00	0.9333E 00	0.4554E-00	0.2632E-00	0.4730E-01	0.1023E 01
0.0098	0.4699E-00	0.2011E 01	0.6664E 00	0.9354E 00	0.5085E 00	0.3388E-00	0.7013E-01	0.1023E 01
0.0146	0.4974E-00	0.1939E 01	0.6927E 00	0.9373E 00	0.5273E 00	0.3652E-00	0.8025E-01	0.1023E 01
0.0195	0.5182E 00	0.1886E 01	0.7118E 00	0.9391E 00	0.5420E 00	0.3858E-00	0.8900E-01	0.1022E 01
0.0244	0.5340E 00	0.1847E 01	0.7258E 00	0.9407E 00	0.5535E 00	0.4017E-00	0.9633E-01	0.1022E 01
0.0293	0.5489E 00	0.1811E 01	0.7387E 00	0.9423E 00	0.5645E 00	0.4170E-00	0.1039E-00	0.1022E 01
0.0341	0.5622E 00	0.1779E 01	0.7499E 00	0.9437E 00	0.5746E 00	0.4309E-00	0.1111E-00	0.1022E 01
0.0390	0.5741E 00	0.1751E 01	0.7598E 00	0.9453E 00	0.5836E 00	0.4434E-00	0.1180E-00	0.1022E 01
0.0439	0.5845E 00	0.1727E 01	0.7683E 00	0.9467E 00	0.5916E 00	0.4545E-00	0.1245E-00	0.1022E 01
0.0488	0.5937E 00	0.1707E 01	0.7757E 00	0.9481E 00	0.5986E 00	0.4643E-00	0.1305E-00	0.1022E 01
0.0732	0.6314E 00	0.1626E 01	0.8051E 00	0.9545E 00	0.6282E 00	0.5057E 00	0.1584E-00	0.1021E 01
0.0976	0.6609E 00	0.1564E 01	0.8265E 00	0.9591E 00	0.6528E 00	0.5394E 00	0.1844E-00	0.1021E 01
0.1220	0.6869E 00	0.1511E 01	0.8443E 00	0.9630E 00	0.6753E 00	0.5701E 00	0.2109E-00	0.1020E 01
0.1463	0.7073E 00	0.1470E 01	0.8577E 00	0.9659E 00	0.6934E 00	0.5947E 00	0.2342E-00	0.1020E 01
0.1707	0.7262E 00	0.1434E 01	0.8696E 00	0.9686E 00	0.7107E 00	0.6179E 00	0.2581E-00	0.1019E 01
0.1951	0.7446E 00	0.1399E 01	0.8808E 00	0.9711E 00	0.7279E 00	0.6411E 00	0.2837E-00	0.1018E 01
0.2195	0.7596E 00	0.1371E 01	0.8896E 00	0.9731E 00	0.7423E 00	0.6603E 00	0.3064E-00	0.1018E 01
0.2439	0.7715E 00	0.1350E 01	0.8964E 00	0.9747E 00	0.7537E 00	0.6756E 00	0.3255E-00	0.1017E 01
0.2683	0.7829E 00	0.1329E 01	0.9028E 00	0.9762E 00	0.7648E 00	0.6904E 00	0.3449E-00	0.1017E 01
0.2927	0.7922E 00	0.1313E 01	0.9079E 00	0.9774E 00	0.7740E 00	0.7026E 00	0.3616E-00	0.1016E 01
0.3171	0.8000E 00	0.1299E 01	0.9121E 00	0.9784E 00	0.7816E 00	0.7128E 00	0.3761E-00	0.1016E 01
0.3415	0.8086E 00	0.1285E 01	0.9166E 00	0.9794E 00	0.7901E 00	0.7242E 00	0.3927E-00	0.1015E 01
0.3659	0.8198E 00	0.1266E 01	0.9224E 00	0.9808E 00	0.8016E 00	0.7393E 00	0.4156E-00	0.1015E 01
0.3902	0.8296E 00	0.1249E 01	0.9274E 00	0.9820E 00	0.8116E 00	0.7525E 00	0.4364E-00	0.1014E 01
0.4146	0.8392E 00	0.1234E 01	0.9321E 00	0.9831E 00	0.8215E 00	0.7657E 00	0.4580E-00	0.1013E 01
0.4390	0.8487E 00	0.1218E 01	0.9368E 00	0.9843E 00	0.8315E 00	0.7789E 00	0.4803E-00	0.1013E 01
0.4634	0.8621E 00	0.1197E 01	0.9432E 00	0.9858E 00	0.8459E 00	0.7977E 00	0.5134E 00	0.1012E 01
0.4878	0.8701E 00	0.1184E 01	0.9469E 00	0.9867E 00	0.8544E 00	0.8090E 00	0.5342E 00	0.1012E 01
0.5122	0.8793E 00	0.1170E 01	0.9512E 00	0.9878E 00	0.8644E 00	0.8221E 00	0.5592E 00	0.1011E 01
0.5366	0.8910E 00	0.1152E 01	0.9564E 00	0.9891E 00	0.8772E 00	0.8389E 00	0.5924E 00	0.1011E 01
0.5610	0.9000E 00	0.1138E 01	0.9604E 00	0.9900E 00	0.8872E 00	0.8520E 00	0.6194E 00	0.1010E 01
0.5854	0.9102E 00	0.1123E 01	0.9648E 00	0.9911E 00	0.8986E 00	0.8669E 00	0.6512E 00	0.1009E 01
0.6098	0.9203E 00	0.1109E 01	0.9691E 00	0.9922E 00	0.9101E 00	0.8819E 00	0.6841E 00	0.1009E 01
0.6341	0.9303E 00	0.1094E 01	0.9732E 00	0.9932E 00	0.9215E 00	0.8968E 00	0.7183E 00	0.1008E 01
0.6585	0.9378E 00	0.1084E 01	0.9763E 00	0.9940E 00	0.9300E 00	0.9079E 00	0.7448E 00	0.1008E 01
0.6829	0.9452E 00	0.1073E 01	0.9793E 00	0.9948E 00	0.9385E 00	0.9190E 00	0.7721E 00	0.1007E 01
0.7073	0.9526E 00	0.1063E 01	0.9823E 00	0.9955E 00	0.9471E 00	0.9302E 00	0.8001E 00	0.1007E 01
0.7317	0.9607E 00	0.1052E 01	0.9854E 00	0.9963E 00	0.9565E 00	0.9424E 00	0.8317E 00	0.1006E 01
0.7561	0.9684E 00	0.1041E 01	0.9884E 00	0.9971E 00	0.9656E 00	0.9543E 00	0.8633E 00	0.1006E 01
0.7805	0.9734E 00	0.1035E 01	0.9903E 00	0.9976E 00	0.9712E 00	0.9616E 00	0.8837E 00	0.1005E 01
0.8049	0.9783E 00	0.1028E 01	0.9921E 00	0.9980E 00	0.9768E 00	0.9690E 00	0.9045E 00	0.1004E 01
0.8293	0.9832E 00	0.1022E 01	0.9939E 00	0.9985E 00	0.9824E 00	0.9764E 00	0.9257E 00	0.1004E 01
0.8537	0.9881E 00	0.1015E 01	0.9957E 00	0.9989E 00	0.9881E 00	0.9838E 00	0.9472E 00	0.1003E 01
0.8780	0.9906E 00	0.1012E 01	0.9967E 00	0.9992E 00	0.9909E 00	0.9874E 00	0.9585E 00	0.1003E 01
0.9024	0.9921E 00	0.1010E 01	0.9972E 00	0.9993E 00	0.9920E 00	0.9892E 00	0.9645E 00	0.1002E 01
0.9268	0.9935E 00	0.1008E 01	0.9977E 00	0.9994E 00	0.9933E 00	0.9910E 00	0.9706E 00	0.1002E 01
0.9512	0.9960E 00	0.1005E 01	0.9987E 00	0.9997E 00	0.9960E 00	0.9946E 00	0.9822E 00	0.1001E 01
0.9756	0.9986E 00	0.1002E 01	0.9996E 00	0.9999E 00	0.9988E 00	0.9982E 00	0.9938E 00	0.1001E 01
1.0000	0.1000E 01	1.0000E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01

TABLE IV - CONTINUED.

(1) $M_\infty = 3.30$ STATION 14 $T_w/T_\delta = 2.911$

$\delta = 0.950$ IN $M_\delta = 3.311$ $T_\delta = 177.1$ °R $U_\delta = 2159$ FT/SEC $T_{T_\delta} = 565.3$ °R

$\rho_\delta = 0.4156 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.8975$ SLUGS/FT² - SEC $P_\delta = 126.31$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2911E 01	0.	0.9121E 00	0.3509E-00	0.	0.1758E-01	0.1021E 01
0.0053	0.3882E-00	0.2196E 01	0.5753E 00	0.9151E 00	0.4652E-00	0.2676E-00	0.4773E-01	0.1021E 01
0.0105	0.4741E-00	0.1962E 01	0.6643E 00	0.9177E 00	0.5205E 00	0.3457E-00	0.7144E-01	0.1021E 01
0.0158	0.5146E 00	0.1859E 01	0.7017E 00	0.9204E 00	0.5494E 00	0.3855E-00	0.8724E-01	0.1021E 01
0.0211	0.5391E 00	0.1800E 01	0.7234E 00	0.9230E 00	0.5674E 00	0.4104E-00	0.9867E-01	0.1021E 01
0.0263	0.5528E 00	0.1770E 01	0.7356E 00	0.9259E 00	0.5769E 00	0.4243E-00	0.1058E-00	0.1021E 01
0.0316	0.5630E 00	0.1749E 01	0.7447E 00	0.9287E 00	0.5837E 00	0.4345E-00	0.1113E-00	0.1021E 01
0.0368	0.5718E 00	0.1732E 01	0.7526E 00	0.9314E 00	0.5895E 00	0.4435E-00	0.1165E-00	0.1021E 01
0.0421	0.5804E 00	0.1715E 01	0.7603E 00	0.9342E 00	0.5951E 00	0.4523E-00	0.1217E-00	0.1021E 01
0.0474	0.5882E 00	0.1701E 01	0.7672E 00	0.9368E 00	0.6001E 00	0.4603E-00	0.1266E-00	0.1020E 01
0.0526	0.5958E 00	0.1687E 01	0.7740E 00	0.9397E 00	0.6050E 00	0.4681E-00	0.1317E-00	0.1020E 01
0.0789	0.6298E 00	0.1629E 01	0.8040E 00	0.9540E 00	0.6262E 00	0.5033E 00	0.1569E-00	0.1020E 01
0.1053	0.6580E 00	0.1569E 01	0.8245E 00	0.9584E 00	0.6495E 00	0.5354E 00	0.1814E-00	0.1019E 01
0.1316	0.6821E 00	0.1520E 01	0.8411E 00	0.9620E 00	0.6702E 00	0.5636E 00	0.2054E-00	0.1019E 01
0.1579	0.7031E 00	0.1478E 01	0.8550E 00	0.9651E 00	0.6887E 00	0.5888E 00	0.2289E-00	0.1018E 01
0.1842	0.7217E 00	0.1442E 01	0.8669E 00	0.9677E 00	0.7056E 00	0.6115E 00	0.2518E-00	0.1017E 01
0.2105	0.7392E 00	0.1409E 01	0.8776E 00	0.9702E 00	0.7218E 00	0.6333E 00	0.2755E-00	0.1017E 01
0.2368	0.7545E 00	0.1381E 01	0.8867E 00	0.9723E 00	0.7363E 00	0.6527E 00	0.2979E-00	0.1016E 01
0.2632	0.7671E 00	0.1357E 01	0.8940E 00	0.9740E 00	0.7484E 00	0.6689E 00	0.3178E-00	0.1016E 01
0.2895	0.7787E 00	0.1337E 01	0.9005E 00	0.9755E 00	0.7597E 00	0.6839E 00	0.3372E-00	0.1015E 01
0.3158	0.7893E 00	0.1318E 01	0.9063E 00	0.9768E 00	0.7700E 00	0.6977E 00	0.3558E-00	0.1015E 01
0.3421	0.7987E 00	0.1302E 01	0.9114E 00	0.9780E 00	0.7792E 00	0.7100E 00	0.3730E-00	0.1014E 01
0.3684	0.8073E 00	0.1287E 01	0.9160E 00	0.9791E 00	0.7878E 00	0.7214E 00	0.3896E-00	0.1014E 01
0.3947	0.8187E 00	0.1267E 01	0.9219E 00	0.9805E 00	0.7994E 00	0.7367E 00	0.4126E-00	0.1013E 01
0.4211	0.8272E 00	0.1253E 01	0.9262E 00	0.9816E 00	0.8080E 00	0.7481E 00	0.4306E-00	0.1012E 01
0.4474	0.8383E 00	0.1235E 01	0.9317E 00	0.9829E 00	0.8195E 00	0.7634E 00	0.4553E-00	0.1012E 01
0.4737	0.8492E 00	0.1217E 01	0.9371E 00	0.9842E 00	0.8310E 00	0.7786E 00	0.4810E-00	0.1011E 01
0.5000	0.8601E 00	0.1200E 01	0.9423E 00	0.9855E 00	0.8426E 00	0.7937E 00	0.5077E 00	0.1011E 01
0.5263	0.8695E 00	0.1185E 01	0.9467E 00	0.9865E 00	0.8526E 00	0.8070E 00	0.5320E 00	0.1010E 01
0.5526	0.8775E 00	0.1172E 01	0.9504E 00	0.9874E 00	0.8612E 00	0.8183E 00	0.5536E 00	0.1010E 01
0.5789	0.8868E 00	0.1158E 01	0.9546E 00	0.9885E 00	0.8713E 00	0.8315E 00	0.5795E 00	0.1009E 01
0.6053	0.8947E 00	0.1146E 01	0.9581E 00	0.9894E 00	0.8799E 00	0.8428E 00	0.6025E 00	0.1008E 01
0.6316	0.9038E 00	0.1133E 01	0.9621E 00	0.9903E 00	0.8900E 00	0.8560E 00	0.6300E 00	0.1008E 01
0.6579	0.9153E 00	0.1116E 01	0.9670E 00	0.9916E 00	0.9029E 00	0.8730E 00	0.6666E 00	0.1007E 01
0.6842	0.9267E 00	0.1099E 01	0.9718E 00	0.9928E 00	0.9159E 00	0.8899E 00	0.7048E 00	0.1007E 01
0.7105	0.9367E 00	0.1085E 01	0.9759E 00	0.9938E 00	0.9275E 00	0.9049E 00	0.7401E 00	0.1006E 01
0.7368	0.9442E 00	0.1074E 01	0.9790E 00	0.9946E 00	0.9361E 00	0.9161E 00	0.7675E 00	0.1006E 01
0.7632	0.9517E 00	0.1064E 01	0.9819E 00	0.9953E 00	0.9447E 00	0.9274E 00	0.7957E 00	0.1005E 01
0.7895	0.9591E 00	0.1054E 01	0.9848E 00	0.9961E 00	0.9533E 00	0.9386E 00	0.8246E 00	0.1005E 01
0.8158	0.9653E 00	0.1045E 01	0.9872E 00	0.9967E 00	0.9604E 00	0.9479E 00	0.8494E 00	0.1004E 01
0.8421	0.9726E 00	0.1036E 01	0.9900E 00	0.9974E 00	0.9690E 00	0.9591E 00	0.8798E 00	0.1003E 01
0.8684	0.9800E 00	0.1026E 01	0.9928E 00	0.9981E 00	0.9776E 00	0.9703E 00	0.9110E 00	0.1003E 01
0.8947	0.9860E 00	0.1018E 01	0.9951E 00	0.9987E 00	0.9847E 00	0.9796E 00	0.9377E 00	0.1002E 01
0.9211	0.9898E 00	0.1013E 01	0.9964E 00	0.9991E 00	0.9889E 00	0.9852E 00	0.9543E 00	0.1002E 01
0.9474	0.9935E 00	0.1008E 01	0.9978E 00	0.9994E 00	0.9932E 00	0.9907E 00	0.9712E 00	0.1001E 01
0.9737	0.9973E 00	0.1003E 01	0.9992E 00	0.9998E 00	0.9974E 00	0.9963E 00	0.9882E 00	0.1001E 01
1.0000	0.9999E 00	0.1000E 01	0.1000E 01	1.0000E 00	0.1000E 01	0.9999E 00	1.0000E 00	1.0000E 00

TABLE IV - CONTINUED.

(J) M_∞ = 3.30 STATION 16 T_w/T_δ = 2.854

δ = 0.975 IN M_δ = 3.206 T_δ = 185.5 °R U_δ = 2140 FT/SEC T_{T_δ} = 566.9 °R

ρ_δ = 0.4273 × 10^{-3} SLUGS/FT³ $\rho_\delta U_\delta$ = 0.9146 SLUGS/FT²-SEC P_δ = 136.02 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2854E 01	0.	0.9340E 00	0.3504E-00	0.	0.2004E-01	0.1000E 01
0.0051	0.3968E-00	0.2161E 01	0.5832E 00	0.9358E 00	0.4629E-00	0.2699E-00	0.5345E-01	0.1000E 01
0.0103	0.4562E-00	0.2006E 01	0.6462E 00	0.9374E 00	0.4984E-00	0.3220E-00	0.6968E-01	0.1000E 01
0.0154	0.4909E-00	0.1919E 01	0.6800E 00	0.9390E 00	0.5211E 00	0.3543E-00	0.8192E-01	0.1000E 01
0.0205	0.5172E 00	0.1854E 01	0.7043E 00	0.9404E 00	0.5393E 00	0.3798E-00	0.9287E-01	0.1000E 01
0.0256	0.5365E 00	0.1809E 01	0.7215E 00	0.9420E 00	0.5529E 00	0.3989E-00	0.1019E-00	0.1000E 01
0.0308	0.5508E 00	0.1776E 01	0.7340E 00	0.9434E 00	0.5632E 00	0.4133E-00	0.1093E-00	0.1000E 01
0.0359	0.5631E 00	0.1748E 01	0.7445E 00	0.9448E 00	0.5721E 00	0.4258E-00	0.1161E-00	0.1000E 01
0.0410	0.5742E 00	0.1723E 01	0.7538E 00	0.9460E 00	0.5804E 00	0.4374E-00	0.1226E-00	0.1000E 01
0.0462	0.5828E 00	0.1705E 01	0.7609E 00	0.9473E 00	0.5867E 00	0.4463E-00	0.1279E-00	0.1000E 01
0.0513	0.5912E 00	0.1686E 01	0.7678E 00	0.9483E 00	0.5930E 00	0.4552E-00	0.1333E-00	0.1000E 01
0.0769	0.6263E 00	0.1613E 01	0.7955E 00	0.9535E 00	0.6200E 00	0.4931E-00	0.1588E-00	0.1000E 01
0.1026	0.6563E 00	0.1553E 01	0.8179E 00	0.9581E 00	0.6440E 00	0.5266E 00	0.1844E-00	0.1000E 01
0.1282	0.6846E 00	0.1498E 01	0.8375E 00	0.9623E 00	0.6677E 00	0.5593E 00	0.2126E-00	0.1000E 01
0.1538	0.7022E 00	0.1464E 01	0.8497E 00	0.9649E 00	0.6829E 00	0.5802E 00	0.2322E-00	0.1000E 01
0.1795	0.7213E 00	0.1429E 01	0.8622E 00	0.9676E 00	0.6999E 00	0.6033E 00	0.2555E-00	0.1000E 01
0.2051	0.7399E 00	0.1395E 01	0.8739E 00	0.9702E 00	0.7169E 00	0.6263E 00	0.2804E-00	0.1000E 01
0.2308	0.7571E 00	0.1364E 01	0.8843E 00	0.9725E 00	0.7330E 00	0.6480E 00	0.3056E-00	0.1000E 01
0.2564	0.7708E 00	0.1340E 01	0.8924E 00	0.9743E 00	0.7461E 00	0.6657E 00	0.3274E-00	0.1000E 01
0.2821	0.7829E 00	0.1320E 01	0.8994E 00	0.9759E 00	0.7578E 00	0.6814E 00	0.3477E-00	0.1000E 01
0.3077	0.7944E 00	0.1300E 01	0.9058E 00	0.9774E 00	0.7692E 00	0.6967E 00	0.3683E-00	0.1000E 01
0.3333	0.8076E 00	0.1278E 01	0.9130E 00	0.9790E 00	0.7824E 00	0.7142E 00	0.3931E-00	0.1000E 01
0.3590	0.8176E 00	0.1262E 01	0.9184E 00	0.9803E 00	0.7926E 00	0.7278E 00	0.4133E-00	0.1000E 01
0.3846	0.8276E 00	0.1246E 01	0.9237E 00	0.9815E 00	0.8028E 00	0.7414E 00	0.4341E-00	0.1000E 01
0.4103	0.8374E 00	0.1230E 01	0.9287E 00	0.9827E 00	0.8131E 00	0.7550E 00	0.4557E-00	0.1000E 01
0.4359	0.8471E 00	0.1215E 01	0.9337E 00	0.9838E 00	0.8233E 00	0.7685E 00	0.4781E-00	0.1000E 01
0.4615	0.8540E 00	0.1204E 01	0.9371E 00	0.9846E 00	0.8306E 00	0.7782E 00	0.4945E-00	0.1000E 01
0.4872	0.8621E 00	0.1191E 01	0.9411E 00	0.9856E 00	0.8394E 00	0.7898E 00	0.5148E 00	0.1000E 01
0.5128	0.8702E 00	0.1179E 01	0.9450E 00	0.9865E 00	0.8481E 00	0.8013E 00	0.5356E 00	0.1000E 01
0.5385	0.8783E 00	0.1167E 01	0.9488E 00	0.9874E 00	0.8569E 00	0.8129E 00	0.5570E 00	0.1000E 01
0.5641	0.8875E 00	0.1153E 01	0.9531E 00	0.9885E 00	0.8671E 00	0.8263E 00	0.5828E 00	0.1000E 01
0.5897	0.8967E 00	0.1140E 01	0.9574E 00	0.9895E 00	0.8773E 00	0.8398E 00	0.6094E 00	0.1000E 01
0.6154	0.9045E 00	0.1129E 01	0.9609E 00	0.9903E 00	0.8861E 00	0.8513E 00	0.6329E 00	0.1000E 01
0.6410	0.9135E 00	0.1116E 01	0.9649E 00	0.9913E 00	0.8963E 00	0.8647E 00	0.6611E 00	0.1000E 01
0.6667	0.9224E 00	0.1103E 01	0.9688E 00	0.9923E 00	0.9066E 00	0.8781E 00	0.6902E 00	0.1000E 01
0.6923	0.9312E 00	0.1091E 01	0.9726E 00	0.9932E 00	0.9168E 00	0.8915E 00	0.7201E 00	0.1000E 01
0.7179	0.9399E 00	0.1079E 01	0.9763E 00	0.9941E 00	0.9270E 00	0.9048E 00	0.7510E 00	0.1000E 01
0.7436	0.9486E 00	0.1067E 01	0.9799E 00	0.9950E 00	0.9372E 00	0.9182E 00	0.7829E 00	0.1000E 01
0.7692	0.9571E 00	0.1056E 01	0.9834E 00	0.9959E 00	0.9474E 00	0.9315E 00	0.8157E 00	0.1000E 01
0.7949	0.9644E 00	0.1046E 01	0.9863E 00	0.9966E 00	0.9562E 00	0.9430E 00	0.8446E 00	0.1000E 01
0.8205	0.9717E 00	0.1036E 01	0.9892E 00	0.9973E 00	0.9650E 00	0.9544E 00	0.8742E 00	0.1000E 01
0.8462	0.9789E 00	0.1027E 01	0.9920E 00	0.9980E 00	0.9737E 00	0.9658E 00	0.9045E 00	0.1000E 01
0.8718	0.9836E 00	0.1021E 01	0.9939E 00	0.9985E 00	0.9796E 00	0.9734E 00	0.9251E 00	0.1000E 01
0.8974	0.9872E 00	0.1016E 01	0.9952E 00	0.9988E 00	0.9839E 00	0.9791E 00	0.9408E 00	0.1000E 01
0.9231	0.9907E 00	0.1012E 01	0.9966E 00	0.9992E 00	0.9883E 00	0.9849E 00	0.9567E 00	0.1000E 01
0.9487	0.9942E 00	0.1007E 01	0.9979E 00	0.9995E 00	0.9927E 00	0.9905E 00	0.9728E 00	0.1000E 01
0.9744	0.9976E 00	0.1003E 01	0.9993E 00	0.9999E 00	0.9971E 00	0.9962E 00	0.9890E 00	0.1000E 01
1.0000	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	1.0000E 00	1.0000E 00	0.1000E 01

TABLE IV - CONTINUED.

(k) $M_\infty = 4.50$ STATION 10 $T_w/T_\delta = 4.090$

$\delta = 1.100$ IN $M_\delta = 4.243$ $T_\delta = 122.0$ °R $U_\delta = 2297$ FT/SEC $T_{T_\delta} = 561.1$ °R

$\rho_\delta = 0.1414 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.3247$ SLUGS/FT²-SEC $P_\delta = 29.59$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.4091E 01	0.	0.8895E 00	0.2340E-00	0.	0.4587E-02	0.9574E 00
0.0045	0.1859E-00	0.3654E 01	0.3553E-00	0.8932E 00	0.2620E-00	0.9310E-01	0.6914E-02	0.9574E 00
0.0091	0.3157E-00	0.3033E 01	0.5499E 00	0.8963E 00	0.3156E-00	0.1736E-00	0.1342E-01	0.9574E 00
0.0136	0.3759E-00	0.2740E 01	0.6222E 00	0.8988E 00	0.3494E-00	0.2175E-00	0.1935E-01	0.9574E 00
0.0182	0.4159E-00	0.2553E 01	0.6645E 00	0.9009E 00	0.3749E-00	0.2492E-00	0.2496E-01	0.9574E 00
0.0227	0.4424E-00	0.2436E 01	0.6904E 00	0.9029E 00	0.3930E-00	0.2714E-00	0.2966E-01	0.9574E 00
0.0273	0.4601E-00	0.2361E 01	0.7069E 00	0.9045E 00	0.4055E-00	0.2867E-00	0.3332E-01	0.9574E 00
0.0318	0.4739E-00	0.2304E 01	0.7193E 00	0.9061E 00	0.4154E-00	0.2989E-00	0.3648E-01	0.9574E 00
0.0364	0.4841E-00	0.2264E 01	0.7283E 00	0.9075E 00	0.4229E-00	0.3081E-00	0.3904E-01	0.9574E 00
0.0409	0.4932E-00	0.2228E 01	0.7361E 00	0.9088E 00	0.4296E-00	0.3163E-00	0.4145E-01	0.9574E 00
0.0455	0.5011E 00	0.2198E 01	0.7428E 00	0.9098E 00	0.4355E-00	0.3236E-00	0.4368E-01	0.9574E 00
0.0682	0.5332E 00	0.2080E 01	0.7688E 00	0.9150E 00	0.4603E-00	0.3540E-00	0.5406E-01	0.9574E 00
0.0909	0.5615E 00	0.1979E 01	0.7899E 00	0.9188E 00	0.4836E-00	0.3821E-00	0.6522E-01	0.9574E 00
0.1136	0.5865E 00	0.1912E 01	0.8108E 00	0.9303E 00	0.5007E 00	0.4061E-00	0.7695E-01	0.9574E 00
0.1364	0.6083E 00	0.1855E 01	0.8285E 00	0.9409E 00	0.5159E 00	0.4276E-00	0.8885E-01	0.9574E 00
0.1591	0.6281E 00	0.1801E 01	0.8430E 00	0.9480E 00	0.5314E 00	0.4481E-00	0.1012E-00	0.9574E 00
0.1818	0.6456E 00	0.1753E 01	0.8547E 00	0.9531E 00	0.5461E 00	0.4669E-00	0.1134E-00	0.9574E 00
0.2045	0.6636E 00	0.1702E 01	0.8657E 00	0.9570E 00	0.5623E 00	0.4870E-00	0.1275E-00	0.9574E 00
0.2273	0.6747E 00	0.1671E 01	0.8721E 00	0.9588E 00	0.5729E 00	0.4997E-00	0.1370E-00	0.9574E 00
0.2500	0.6884E 00	0.1633E 01	0.8797E 00	0.9611E 00	0.5860E 00	0.5157E 00	0.1495E-00	0.9574E 00
0.2727	0.7000E 00	0.1602E 01	0.8860E 00	0.9629E 00	0.5974E 00	0.5295E 00	0.1610E-00	0.9574E 00
0.2955	0.7096E 00	0.1577E 01	0.8910E 00	0.9645E 00	0.6071E 00	0.5411E 00	0.1713E-00	0.9574E 00
0.3182	0.7183E 00	0.1554E 01	0.8955E 00	0.9658E 00	0.6159E 00	0.5517E 00	0.1810E-00	0.9574E 00
0.3409	0.7278E 00	0.1530E 01	0.9002E 00	0.9672E 00	0.6255E 00	0.5633E 00	0.1921E-00	0.9574E 00
0.3636	0.7362E 00	0.1509E 01	0.9044E 00	0.9685E 00	0.6343E 00	0.5738E 00	0.2026E-00	0.9574E 00
0.3864	0.7438E 00	0.1490E 01	0.9080E 00	0.9696E 00	0.6422E 00	0.5833E 00	0.2125E-00	0.9574E 00
0.4091	0.7521E 00	0.1470E 01	0.9119E 00	0.9708E 00	0.6510E 00	0.5938E 00	0.2238E-00	0.9574E 00
0.4318	0.7611E 00	0.1449E 01	0.9161E 00	0.9721E 00	0.6607E 00	0.6054E 00	0.2367E-00	0.9574E 00
0.4545	0.7700E 00	0.1428E 01	0.9201E 00	0.9733E 00	0.6703E 00	0.6169E 00	0.2501E-00	0.9574E 00
0.4773	0.7788E 00	0.1408E 01	0.9240E 00	0.9745E 00	0.6800E 00	0.6285E 00	0.2641E-00	0.9574E 00
0.5000	0.7875E 00	0.1388E 01	0.9277E 00	0.9757E 00	0.6896E 00	0.6400E 00	0.2787E-00	0.9574E 00
0.5227	0.7961E 00	0.1369E 01	0.9314E 00	0.9769E 00	0.6993E 00	0.6515E 00	0.2938E-00	0.9574E 00
0.5455	0.8046E 00	0.1350E 01	0.9349E 00	0.9780E 00	0.7089E 00	0.6630E 00	0.3094E-00	0.9574E 00
0.5682	0.8131E 00	0.1332E 01	0.9384E 00	0.9791E 00	0.7186E 00	0.6745E 00	0.3257E-00	0.9574E 00
0.5909	0.8206E 00	0.1316E 01	0.9414E 00	0.9800E 00	0.7273E 00	0.6849E 00	0.3410E-00	0.9574E 00
0.6136	0.8282E 00	0.1300E 01	0.9443E 00	0.9809E 00	0.7361E 00	0.6953E 00	0.3568E-00	0.9574E 00
0.6364	0.8360E 00	0.1284E 01	0.9473E 00	0.9819E 00	0.7460E 00	0.7069E 00	0.3742E-00	0.9582E 00
0.6591	0.8466E 00	0.1263E 01	0.9513E 00	0.9832E 00	0.7593E 00	0.7226E 00	0.3991E-00	0.9592E 00
0.6818	0.8577E 00	0.1241E 01	0.9555E 00	0.9846E 00	0.7736E 00	0.7393E 00	0.4269E-00	0.9601E 00
0.7045	0.8700E 00	0.1217E 01	0.9598E 00	0.9860E 00	0.7897E 00	0.7582E 00	0.4595E-00	0.9615E 00
0.7273	0.8831E 00	0.1193E 01	0.9644E 00	0.9876E 00	0.8077E 00	0.7791E 00	0.4974E-00	0.9634E 00
0.7500	0.8951E 00	0.1171E 01	0.9685E 00	0.9889E 00	0.8249E 00	0.7991E 00	0.5348E 00	0.9658E 00
0.7727	0.9074E 00	0.1149E 01	0.9725E 00	0.9903E 00	0.8430E 00	0.8201E 00	0.5758E 00	0.9687E 00
0.7955	0.9201E 00	0.1127E 01	0.9766E 00	0.9917E 00	0.8621E 00	0.8421E 00	0.6212E 00	0.9715E 00
0.8182	0.9318E 00	0.1107E 01	0.9803E 00	0.9930E 00	0.8802E 00	0.8631E 00	0.6663E 00	0.9744E 00
0.8409	0.9441E 00	0.1086E 01	0.9840E 00	0.9943E 00	0.8993E 00	0.8851E 00	0.7162E 00	0.9772E 00
0.8636	0.9554E 00	0.1068E 01	0.9873E 00	0.9955E 00	0.9175E 00	0.9061E 00	0.7657E 00	0.9801E 00
0.8864	0.9659E 00	0.1051E 01	0.9904E 00	0.9966E 00	0.9347E 00	0.9260E 00	0.8146E 00	0.9829E 00
0.9091	0.9757E 00	0.1036E 01	0.9931E 00	0.9975E 00	0.9512E 00	0.9449E 00	0.8625E 00	0.9858E 00
0.9318	0.9859E 00	0.1021E 01	0.9959E 00	0.9985E 00	0.9684E 00	0.9648E 00	0.9152E 00	0.9886E 00
0.9545	0.9912E 00	0.1013E 01	0.9974E 00	0.9991E 00	0.9798E 00	0.9776E 00	0.9462E 00	0.9924E 00
0.9773	0.9965E 00	0.1005E 01	0.9989E 00	0.9997E 00	0.9912E 00	0.9903E 00	0.9777E 00	0.9962E 00
1.0000	0.9999E 00	0.9999E 00	0.9998E 00	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01

TABLE IV - CONTINUED.

(1) $M_\infty = 4.50$ STATION 12 $T_w/T_\delta = 4.238$

$\delta = 1.150$ IN $M_\delta = 4.323$ $T_\delta = 118.9$ °R $U_\delta = 2311$ FT/SEC $T_{T_\delta} = 563.5$ °R

$\rho_\delta = 0.1513 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.3497$ SLUGS/FT²-SEC $P_\delta = 30.88$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.4238E 01	0.	0.8942E 00	0.2296E-00	0.	0.4201E-02	0.9727E 00
0.0043	0.2104E-00	0.3643E 01	0.4014E-00	0.8958E 00	0.2671E-00	0.1072E-00	0.7179E-02	0.9727E 00
0.0087	0.3027E-00	0.3170E 01	0.5387E 00	0.8980E 00	0.3070E-00	0.1654E-00	0.1177E-01	0.9727E 00
0.0130	0.3597E-00	0.2874E 01	0.6096E 00	0.8997E 00	0.3386E-00	0.2064E-00	0.1670E-01	0.9727E 00
0.0174	0.4030E-00	0.2659E 01	0.6570E 00	0.9017E 00	0.3660E-00	0.2404E-00	0.2210E-01	0.9727E 00
0.0217	0.4372E-00	0.2498E 01	0.6907E 00	0.9035E 00	0.3896E-00	0.2691E-00	0.2770E-01	0.9727E 00
0.0261	0.4540E-00	0.2424E 01	0.7066E 00	0.9054E 00	0.4015E-00	0.2837E-00	0.3101E-01	0.9727E 00
0.0304	0.4662E-00	0.2372E 01	0.7179E 00	0.9073E 00	0.4102E-00	0.2944E-00	0.3366E-01	0.9727E 00
0.0348	0.4764E-00	0.2331E 01	0.7271E 00	0.9091E 00	0.4175E-00	0.3035E-00	0.3605E-01	0.9727E 00
0.0391	0.4847E-00	0.2299E 01	0.7347E 00	0.9110E 00	0.4234E-00	0.3110E-00	0.3814E-01	0.9727E 00
0.0435	0.4924E-00	0.2306E 01	0.7475E 00	0.9275E 00	0.4220E-00	0.3154E-00	0.4017E-01	0.9727E 00
0.0652	0.5254E 00	0.2150E 01	0.7702E 00	0.9218E 00	0.4526E-00	0.3485E-00	0.5021E-01	0.9727E 00
0.0870	0.5533E 00	0.2055E 01	0.7930E 00	0.9299E 00	0.4735E-00	0.3754E-00	0.6064E-01	0.9727E 00
0.1087	0.5791E 00	0.1976E 01	0.8137E 00	0.9394E 00	0.4926E-00	0.4008E-00	0.7215E-01	0.9727E 00
0.1304	0.6026E 00	0.1905E 01	0.8315E 00	0.9477E 00	0.5107E 00	0.4246E-00	0.8445E-01	0.9727E 00
0.1522	0.6231E 00	0.1844E 01	0.8459E 00	0.9538E 00	0.5277E 00	0.4463E-00	0.9684E-01	0.9727E 00
0.1739	0.6404E 00	0.1792E 01	0.8569E 00	0.9576E 00	0.5431E 00	0.4653E-00	0.1086E-00	0.9727E 00
0.1957	0.6565E 00	0.1744E 01	0.8666E 00	0.9607E 00	0.5580E 00	0.4835E-00	0.1208E-00	0.9727E 00
0.2174	0.6694E 00	0.1706E 01	0.8740E 00	0.9627E 00	0.5706E 00	0.4986E-00	0.1315E-00	0.9727E 00
0.2391	0.6839E 00	0.1664E 01	0.8819E 00	0.9648E 00	0.5849E 00	0.5157E 00	0.1445E-00	0.9727E 00
0.2609	0.6937E 00	0.1636E 01	0.8871E 00	0.9663E 00	0.5947E 00	0.5275E 00	0.1540E-00	0.9727E 00
0.2826	0.7042E 00	0.1607E 01	0.8925E 00	0.9678E 00	0.6055E 00	0.5403E 00	0.1649E-00	0.9727E 00
0.3043	0.7137E 00	0.1582E 01	0.8973E 00	0.9691E 00	0.6153E 00	0.5520E 00	0.1753E-00	0.9727E 00
0.3261	0.7222E 00	0.1559E 01	0.9015E 00	0.9703E 00	0.6242E 00	0.5627E 00	0.1851E-00	0.9727E 00
0.3478	0.7307E 00	0.1537E 01	0.9056E 00	0.9715E 00	0.6332E 00	0.5733E 00	0.1954E-00	0.9727E 00
0.3696	0.7390E 00	0.1516E 01	0.9095E 00	0.9726E 00	0.6421E 00	0.5839E 00	0.2061E-00	0.9727E 00
0.3913	0.7473E 00	0.1495E 01	0.9133E 00	0.9737E 00	0.6511E 00	0.5946E 00	0.2171E-00	0.9727E 00
0.4130	0.7550E 00	0.1475E 01	0.9168E 00	0.9747E 00	0.6596E 00	0.6046E 00	0.2280E-00	0.9727E 00
0.4348	0.7631E 00	0.1456E 01	0.9204E 00	0.9757E 00	0.6685E 00	0.6152E 00	0.2399E-00	0.9727E 00
0.4565	0.7711E 00	0.1436E 01	0.9239E 00	0.9767E 00	0.6775E 00	0.6258E 00	0.2523E-00	0.9727E 00
0.4783	0.7794E 00	0.1417E 01	0.9274E 00	0.9777E 00	0.6869E 00	0.6369E 00	0.2657E-00	0.9727E 00
0.5000	0.7872E 00	0.1399E 01	0.9307E 00	0.9787E 00	0.6958E 00	0.6475E 00	0.2789E-00	0.9727E 00
0.5217	0.7957E 00	0.1379E 01	0.9342E 00	0.9797E 00	0.7056E 00	0.6591E 00	0.2941E-00	0.9727E 00
0.5435	0.8049E 00	0.1358E 01	0.9379E 00	0.9808E 00	0.7164E 00	0.6718E 00	0.3112E-00	0.9727E 00
0.5652	0.8140E 00	0.1338E 01	0.9414E 00	0.9818E 00	0.7271E 00	0.6844E 00	0.3291E-00	0.9727E 00
0.5870	0.8230E 00	0.1319E 01	0.9449E 00	0.9828E 00	0.7378E 00	0.6970E 00	0.3476E-00	0.9727E 00
0.6087	0.8319E 00	0.1300E 01	0.9482E 00	0.9838E 00	0.7485E 00	0.7097E 00	0.3669E-00	0.9727E 00
0.6304	0.8414E 00	0.1280E 01	0.9517E 00	0.9849E 00	0.7602E 00	0.7233E 00	0.3887E-00	0.9727E 00
0.6522	0.8508E 00	0.1261E 01	0.9551E 00	0.9859E 00	0.7718E 00	0.7370E 00	0.4114E-00	0.9727E 00
0.6739	0.8614E 00	0.1240E 01	0.9588E 00	0.9870E 00	0.7852E 00	0.7528E 00	0.4385E-00	0.9729E 00
0.6957	0.8725E 00	0.1218E 01	0.9626E 00	0.9882E 00	0.7996E 00	0.7696E 00	0.4687E-00	0.9733E 00
0.7174	0.8854E 00	0.1193E 01	0.9668E 00	0.9895E 00	0.8168E 00	0.7896E 00	0.5062E 00	0.9741E 00
0.7391	0.8958E 00	0.1174E 01	0.9702E 00	0.9905E 00	0.8313E 00	0.8065E 00	0.5388E 00	0.9752E 00
0.7609	0.9089E 00	0.1150E 01	0.9743E 00	0.9918E 00	0.8494E 00	0.8275E 00	0.5821E 00	0.9762E 00
0.7826	0.9217E 00	0.1127E 01	0.9782E 00	0.9930E 00	0.8675E 00	0.8485E 00	0.6278E 00	0.9772E 00
0.8043	0.9337E 00	0.1106E 01	0.9818E 00	0.9941E 00	0.8847E 00	0.8685E 00	0.6733E 00	0.9782E 00
0.8261	0.9468E 00	0.1084E 01	0.9856E 00	0.9953E 00	0.9037E 00	0.8905E 00	0.7264E 00	0.9792E 00
0.8478	0.9573E 00	0.1067E 01	0.9885E 00	0.9962E 00	0.9202E 00	0.9095E 00	0.7727E 00	0.9812E 00
0.8696	0.9664E 00	0.1052E 01	0.9910E 00	0.9970E 00	0.9349E 00	0.9264E 00	0.8150E 00	0.9832E 00
0.8913	0.9754E 00	0.1038E 01	0.9934E 00	0.9978E 00	0.9497E 00	0.9433E 00	0.8589E 00	0.9851E 00
0.9130	0.9826E 00	0.1027E 01	0.9953E 00	0.9985E 00	0.9628E 00	0.9582E 00	0.8965E 00	0.9881E 00
0.9348	0.9878E 00	0.1019E 01	0.9967E 00	0.9989E 00	0.9733E 00	0.9700E 00	0.9257E 00	0.9911E 00
0.9565	0.9923E 00	0.1012E 01	0.9979E 00	0.9993E 00	0.9829E 00	0.9807E 00	0.9523E 00	0.9941E 00
0.9783	0.9968E 00	0.1005E 01	0.9990E 00	0.9997E 00	0.9925E 00	0.9914E 00	0.9792E 00	0.9970E 00
1.0000	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01

TABLE IV - CONTINUED.

(m) $M_\infty = 4.50$ STATION 14 $T_w/T_\delta = 3.908$

$\delta = 1.100$ IN $M_\delta = 4.072$ $T_\delta = 130.4$ °R $U_\delta = 2278$ FT/SEC $T_{T_\delta} = 562.6$ °R

$\rho_\delta = 0.1577 \times 10^{-3}$ SLUGS/FT^3 $\rho_\delta U_\delta = 0.3592$ SLUGS/FT^2-SEC $P_\delta = 35.26$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3908E 01	0.	0.9058E 00	0.2437E-00	0.	0.5708E-02	0.9528E 00
0.0045	0.1759E-00	0.3544E 01	0.3312E-00	0.9058E 00	0.2697E-00	0.8901E-01	0.8033E-02	0.9528E 00
0.0091	0.3376E-00	0.2837E 01	0.5688E 00	0.9060E 00	0.3358E-00	0.1910E-00	0.1753E-01	0.9528E 00
0.0136	0.3967E-00	0.2569E 01	0.6361E 00	0.9062E 00	0.3707E-00	0.2358E-00	0.2481E-01	0.9528E 00
0.0182	0.4264E-00	0.2440E 01	0.6663E 00	0.9065E 00	0.3903E-00	0.2601E-00	0.2976E-01	0.9528E 00
0.0227	0.4468E-00	0.2355E 01	0.6860E 00	0.9072E 00	0.4044E-00	0.2775E-00	0.3378E-01	0.9528E 00
0.0273	0.4611E-00	0.2298E 01	0.6993E 00	0.9083E 00	0.4144E-00	0.2898E-00	0.3693E-01	0.9528E 00
0.0318	0.4718E-00	0.2257E 01	0.7091E 00	0.9092E 00	0.4221E-00	0.2993E-00	0.3951E-01	0.9528E 00
0.0364	0.4810E-00	0.2222E 01	0.7173E 00	0.9102E 00	0.4286E-00	0.3075E-00	0.4188E-01	0.9528E 00
0.0409	0.4897E-00	0.2190E 01	0.7249E 00	0.9112E 00	0.4349E-00	0.3153E-00	0.4423E-01	0.9528E 00
0.0455	0.4973E-00	0.2163E 01	0.7316E 00	0.9124E 00	0.4404E-00	0.3222E-00	0.4642E-01	0.9528E 00
0.0682	0.5302E 00	0.2052E 01	0.7599E 00	0.9190E 00	0.4642E-00	0.3527E-00	0.5724E-01	0.9528E 00
0.0909	0.5588E 00	0.1964E 01	0.7834E 00	0.9264E 00	0.4850E-00	0.3800E-00	0.6867E-01	0.9528E 00
0.1136	0.5839E 00	0.1894E 01	0.8040E 00	0.9356E 00	0.5028E 00	0.4043E-00	0.8058E-01	0.9528E 00
0.1364	0.6078E 00	0.1831E 01	0.8227E 00	0.9442E 00	0.5202E 00	0.4280E-00	0.9377E-01	0.9528E 00
0.1591	0.6280E 00	0.1777E 01	0.8374E 00	0.9503E 00	0.5361E 00	0.4489E-00	0.1065E-00	0.9528E 00
0.1818	0.6437F 00	0.1735E 01	0.8481E 00	0.9546E 00	0.5490E 00	0.4657E-00	0.1176E-00	0.9528E 00
0.2045	0.6599E 00	0.1691E 01	0.8585E 00	0.9580E 00	0.5632E 00	0.4835E-00	0.1303E-00	0.9528E 00
0.2273	0.6739E 00	0.1654E 01	0.8670E 00	0.9605E 00	0.5760E 00	0.4994E-00	0.1422E-00	0.9528E 00
0.2500	0.6876E 00	0.1617E 01	0.8749E 00	0.9627E 00	0.5889E 00	0.5152E 00	0.1549E-00	0.9528E 00
0.2727	0.7002E 00	0.1585E 01	0.8819E 00	0.9646E 00	0.6009E 00	0.5300E 00	0.1675E-00	0.9528E 00
0.2955	0.7099E 00	0.1560E 01	0.8871E 00	0.9660E 00	0.6104E 00	0.5416E 00	0.1778E-00	0.9528E 00
0.3182	0.7204E 00	0.1534E 01	0.8926E 00	0.9676E 00	0.6208E 00	0.5542E 00	0.1896E-00	0.9528E 00
0.3409	0.7307E 00	0.1509E 01	0.8980E 00	0.9691E 00	0.6311E 00	0.5668E 00	0.2020E-00	0.9528E 00
0.3636	0.7408E 00	0.1485E 01	0.9031E 00	0.9705E 00	0.6414E 00	0.5793E 00	0.2149E-00	0.9528E 00
0.3864	0.7500E 00	0.1463E 01	0.9076E 00	0.9718E 00	0.6509E 00	0.5908E 00	0.2273E-00	0.9528E 00
0.4091	0.7574E 00	0.1446E 01	0.9112E 00	0.9728E 00	0.6587E 00	0.6002E 00	0.2378E-00	0.9528E 00
0.4318	0.7656E 00	0.1427E 01	0.9150E 00	0.9739E 00	0.6673E 00	0.6107E 00	0.2498E-00	0.9528E 00
0.4545	0.7729E 00	0.1411E 01	0.9184E 00	0.9748E 00	0.6750E 00	0.6200E 00	0.2610E-00	0.9528E 00
0.4773	0.7801E 00	0.1395E 01	0.9217E 00	0.9758E 00	0.6828E 00	0.6294E 00	0.2726E-00	0.9528E 00
0.5000	0.7881E 00	0.1377E 01	0.9253E 00	0.9768E 00	0.6914E 00	0.6398E 00	0.2859E-00	0.9528E 00
0.5227	0.7952E 00	0.1362E 01	0.9284E 00	0.9777E 00	0.6992E 00	0.6492E 00	0.2982E-00	0.9528E 00
0.5455	0.8022E 00	0.1347E 01	0.9315E 00	0.9786E 00	0.7069E 00	0.6585E 00	0.3110E-00	0.9528E 00
0.5682	0.8122E 00	0.1326E 01	0.9357E 00	0.9798E 00	0.7181E 00	0.6720E 00	0.3300E-00	0.9528E 00
0.5909	0.8206E 00	0.1309E 01	0.9392E 00	0.9809E 00	0.7276E 00	0.6834E 00	0.3467E-00	0.9528E 00
0.6136	0.8296E 00	0.1291E 01	0.9429E 00	0.9819E 00	0.7379E 00	0.6959E 00	0.3657E-00	0.9528E 00
0.6364	0.8371E 00	0.1276E 01	0.9459E 00	0.9828E 00	0.7465E 00	0.7062E 00	0.3820E-00	0.9528E 00
0.6591	0.8467E 00	0.1257E 01	0.9496E 00	0.9839E 00	0.7577E 00	0.7197E 00	0.4041E-00	0.9528E 00
0.6818	0.8569E 00	0.1237E 01	0.9536E 00	0.9851E 00	0.7698E 00	0.7341E 00	0.4288E-00	0.9528E 00
0.7045	0.8670E 00	0.1218E 01	0.9573E 00	0.9862E 00	0.7818E 00	0.7486E 00	0.4546E-00	0.9528E 00
0.7273	0.8784E 00	0.1197E 01	0.9615E 00	0.9875E 00	0.7956E 00	0.7651E 00	0.4854E-00	0.9528E 00
0.7500	0.8897E 00	0.1177E 01	0.9655E 00	0.9887E 00	0.8094E 00	0.7815E 00	0.5176E 00	0.9528E 00
0.7727	0.9029E 00	0.1153E 01	0.9701E 00	0.9901E 00	0.8257E 00	0.8011E 00	0.5579E 00	0.9528E 00
0.7955	0.9173E 00	0.1129E 01	0.9749E 00	0.9916E 00	0.8450E 00	0.8239E 00	0.6059E 00	0.9541E 00
0.8182	0.9288E 00	0.1109E 01	0.9787E 00	0.9927E 00	0.8620E 00	0.8437E 00	0.6478E 00	0.9567E 00
0.8409	0.9413E 00	0.1089E 01	0.9827E 00	0.9940E 00	0.8819E 00	0.8667E 00	0.6977E 00	0.9607E 00
0.8636	0.9530E 00	0.1070E 01	0.9863E 00	0.9952E 00	0.9009E 00	0.8887E 00	0.7473E 00	0.9646E 00
0.8864	0.9642E 00	0.1053E 01	0.9897E 00	0.9963E 00	0.9200E 00	0.9107E 00	0.7984E 00	0.9690E 00
0.9091	0.9752E 00	0.1036E 01	0.9930E 00	0.9974E 00	0.9403E 00	0.9338E 00	0.8525E 00	0.9747E 00
0.9318	0.9832E 00	0.1024E 01	0.9953E 00	0.9982E 00	0.9573E 00	0.9529E 00	0.8961E 00	0.9808E 00
0.9545	0.9895E 00	0.1015E 01	0.9972E 00	0.9989E 00	0.9721E 00	0.9695E 00	0.9331E 00	0.9869E 00
0.9773	0.9969E 00	0.1004E 01	0.9993E 00	0.9996E 00	0.9886E 00	0.9881E 00	0.9773E 00	0.9930E 00
1.0000	0.9999E 00	0.9998E 00	0.1000E 01	0.1000E 01	0.9998E 00	0.1000E 01	0.1000E 01	0.1000E 01

TABLE IV - CONCLUDED.

(n) $M_\infty = 4.50$ STATION 16 $T_w/T_\delta = 4.553$

$\delta = 1.125$ IN $M_\delta = 4.488$ $T_\delta = 113.0$ °R $U_\delta = 2338$ FT/SEC $T_{T_\delta} = 568.3$ °R

$\rho_\delta = 0.1697 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.3967$ SLUGS/FT²-SEC $P_\delta = 32.90$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.4554E 01	0.	0.9054E 00	0.2298E-00	0.	0.3673E-02	0.1046E C1
0.0044	0.2385E-00	0.3665E 01	0.4566E-00	0.8957E 00	0.2855E-00	0.1304E-00	0.7557E-02	0.1046E 01
0.0089	0.3203E-00	0.3185E 01	0.5717E 00	0.8951E 00	0.3284E-00	0.1878E-00	0.1232E-01	0.1046E 01
0.0133	0.3630E-00	0.2941E 01	0.6226E 00	0.8951E 00	0.3556E-00	0.2214E-00	0.1629E-01	0.1046E 01
0.0178	0.3856E-00	0.2817E 01	0.6472E 00	0.8957E 00	0.3712E-00	0.2403E-00	0.1897E-01	0.1046E 01
0.0222	0.4016E-00	0.2732E 01	0.6638E 00	0.8962E 00	0.3826E-00	0.2540E-00	0.2115E-01	0.1045E 01
0.0267	0.4149E-00	0.2664E 01	0.6771E 00	0.8969E 00	0.3924E-00	0.2657E-00	0.2317E-01	0.1045E 01
0.0311	0.4255E-00	0.2611E 01	0.6876E 00	0.8978E 00	0.4003E-00	0.2753E-00	0.2494E-01	0.1045E 01
0.0356	0.4352E-00	0.2564E 01	0.6969E 00	0.8988E 00	0.4075E-00	0.2840E-00	0.2667E-01	0.1045E 01
0.0400	0.4440E-00	0.2523E 01	0.7053E 00	0.9001E 00	0.4140E-00	0.2921E-00	0.2836E-01	0.1045E 01
0.0444	0.4520E-00	0.2487E 01	0.7128E 00	0.9015E 00	0.4199E-00	0.2994E-00	0.2997E-01	0.1044E 01
0.0667	0.4859E-00	0.2341E 01	0.7434E 00	0.9081E 00	0.4457E-00	0.3314E-00	0.3798E-01	0.1043E 01
0.0889	0.5146E 00	0.2231E 01	0.7687E 00	0.9169E 00	0.4672E-00	0.3592E-00	0.4642E-01	0.1042E 01
0.1111	0.5398E 00	0.2144E 01	0.7904E 00	0.9266E 00	0.4858E-00	0.3840E-00	0.5534E-01	0.1041E 01
0.1333	0.5635E 00	0.2066E 01	0.8100E 00	0.9362E 00	0.5035E 00	0.4079E-00	0.6523E-01	0.1040E 01
0.1556	0.5865E 00	0.1988E 01	0.8270E 00	0.9429E 00	0.5229E 00	0.4325E-00	0.7651E-01	0.1039E 01
0.1778	0.6028E 00	0.1934E 01	0.8385E 00	0.9478E 00	0.5367E 00	0.4501E-00	0.8555E-01	0.1038E 01
0.2000	0.6204E 00	0.1887E 01	0.8521E 00	0.9567E 00	0.5498E 00	0.4685E-00	0.9641E-01	0.1037E 01
0.2222	0.6358E 00	0.1835E 01	0.8614E 00	0.9592E 00	0.5646E 00	0.4864E-00	0.1071E-00	0.1036E 01
0.2444	0.6502E 00	0.1789E 01	0.8697E 00	0.9614E 00	0.5787E 00	0.5033E 00	0.1180E-00	0.1035E 01
0.2667	0.6628E 00	0.1749E 01	0.8767E 00	0.9634E 00	0.5911E 00	0.5183E 00	0.1283E-00	0.1034E 01
0.2889	0.6729E 00	0.1718E 01	0.8821E 00	0.9649E 00	0.6012E 00	0.5304E 00	0.1372E-00	0.1033E 01
0.3111	0.6837E 00	0.1686E 01	0.8878E 00	0.9664E 00	0.6121E 00	0.5435E 00	0.1473E-00	0.1032E 01
0.3333	0.6942E 00	0.1655E 01	0.8932E 00	0.9680E 00	0.6230E 00	0.5565E 00	0.1579E-00	0.1031E 01
0.3556	0.7033E 00	0.1629E 01	0.8976E 00	0.9692E 00	0.6323E 00	-0.5676E 00	0.1675E-00	0.1030E 01
0.3778	0.7129E 00	0.1602E 01	0.9023E 00	0.9705E 00	0.6424E 00	0.5797E 00	0.1784E-00	0.1029E 01
0.4000	0.7210E 00	0.1579E 01	0.9062E 00	0.9716E 00	0.6509E 00	0.5899E 00	0.1880E-00	0.1028E 01
0.4222	0.7304E 00	0.1554E 01	0.9105E 00	0.9729E 00	0.6610E 00	0.6019E 00	0.1998E-00	0.1027E 01
0.4444	0.7398E 00	0.1529E 01	0.9147E 00	0.9741E 00	0.6710E 00	0.6139E 00	0.2121E-00	0.1026E 01
0.4667	0.7490E 00	0.1505E 01	0.9188E 00	0.9753E 00	0.6811E 00	0.6259E 00	0.2250E-00	0.1025E 01
0.4889	0.7595E 00	0.1478E 01	0.9233E 00	0.9766E 00	0.6928E 00	0.6397E 00	0.2405E-00	0.1024E 01
0.5111	0.7685E 00	0.1455E 01	0.9271E 00	0.9777E 00	0.7029E 00	0.6517E 00	0.2546E-00	0.1023E 01
0.5333	0.7768E 00	0.1435E 01	0.9305E 00	0.9787E 00	0.7122E 00	0.6627E 00	0.2682E-00	0.1022E 01
0.5556	0.7876E 00	0.1409E 01	0.9348E 00	0.9799E 00	0.7246E 00	0.6775E 00	0.2870E-00	0.1021E 01
0.5778	0.8002E 00	0.1379E 01	0.9397E 00	0.9814E 00	0.7394E 00	0.6950E 00	0.3104E-0C	0.1020E 01
0.6000	0.8120E 00	0.1352E 01	0.9441E 00	0.9827E 00	0.7535E 00	0.7115E 00	0.3340E-00	0.1019E 01
0.6222	0.8224E 00	0.1329E 01	0.9480E 00	0.9839E 00	0.7659E 00	0.7262E 00	0.3560E-0C	0.1018E 01
0.6444	0.8345E 00	0.1302E 01	0.9523E 00	0.9852E 00	0.7808E 00	0.7436E 00	0.3835E-00	0.1017E 01
0.6667	0.8459E 00	0.1278E 01	0.9562E 00	0.9863E 00	0.7948E 00	0.7601E 00	0.4110E-00	0.1015E 01
0.6889	0.8583E 00	0.1252E 01	0.9604E 00	0.9876E 00	0.8104E 00	0.7784E 00	0.4430E-0C	0.1014E 01
0.7111	0.8712E 00	0.1226E 01	0.9646E 00	0.9889E 00	0.8268E 00	0.7977E 00	0.4786E-C0	0.1013E 01
0.7333	0.8851E 00	0.1198E 01	0.9690E 00	0.9902E 00	0.8448E 00	0.8187E 00	0.5199E 00	0.1012E 01
0.7556	0.8976E 00	0.1174E 01	0.9728E 00	0.9914E 00	0.8612E 00	0.8379E 00	0.5598E 00	0.1011E 01
0.7778	0.9112E 00	0.1149E 01	0.9768E 00	0.9927E 00	0.8792E 00	0.8590E 00	0.6060E 00	0.1010E C1
0.8000	0.9240E 00	0.1126E 01	0.9805E 00	0.9938E 00	0.8964E 00	0.8791E 00	0.6528E 00	0.1CC9E 01
0.8222	0.9355E 00	0.1106E 01	0.9837E 00	0.9948F 0J	0.9120E 00	0.8973E 00	0.6978E 00	0.1008E 01
0.8444	0.9475E 00	0.1085E 01	0.9870E 00	0.9959E 00	0.9284E 00	0.9165E 00	0.7473E 00	0.1007E 01
0.8667	0.9588E 00	0.1066E 01	0.9899E 00	0.9968E 00	0.9441E 00	0.9347E 00	0.7968E 00	0.1C06E C1
0.8889	0.9695E 00	0.1048E 01	0.9927E 00	0.9977E 00	0.9589E 00	0.9520E 00	0.8462E C0	0.1CC5E 01
0.9111	0.9801E 00	0.1031E 01	0.9953E 00	0.9985E 00	0.9737E 00	0.9693E 00	0.8978E 00	0.1004E 01
0.9333	0.9869E 00	0.1021E 01	0.9970E 00	0.9990E 00	0.9830E 00	0.9802E 00	0.9322E 00	0.1003E 01
0.9556	0.9926E 00	0.1012E C1	0.9984E 00	0.9995E 00	0.9906E 00	0.9892E 00	0.9619E 0C	0.1002E C1
0.9778	0.9973E 00	0.1004E 01	0.9995E 00	0.9998E 00	0.9968E 00	0.9964E 00	0.9866E CC	0.1C01E 01
1.0000	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.9997E 00	0.1000E 01	0.1000E 01	0.1000E 01

TABLE V - PROFILES OF VELOCITY, TEMPERATURE, AND PRESSURE FOR THE CONCAVE CENTER SECTION.

(a) $M_\infty = 1.61$ STATION 0 $T_w/T_\delta = 1.432$

$\delta = 0.900$ IN $M_\delta = 1.601$ $T_\delta = 362.4$ °R $U_\delta = 1493$ FT/SEC $T_{T_\delta} = 548.1$ °R

$\rho_\delta = 1.437 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.146$ SLUGS/FT²-SEC $P_\delta = 893.76$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1433E 01	0.	0.9475E 00	0.6979E 00	0.	0.2351E-00	0.1000E 01
0.0056	0.4817E-00	0.1305E 01	0.5504E 00	0.9652E 00	0.7666E 00	0.4219E-00	0.3484E-00	0.1000E 01
0.0111	0.5398E 00	0.1272E 01	0.6090E 00	0.9664E 00	0.7865E 00	0.4789E-00	0.3828E-00	0.1000E 01
0.0167	0.5739E 00	0.1252E 01	0.6425E 00	0.9675E 00	0.7989E 00	0.5132E 00	0.4060E-00	0.1000E 01
0.0222	0.5993E 00	0.1237E 01	0.6669E 00	0.9684E 00	0.8086E 00	0.5391E 00	0.4248E-00	0.1000E 01
0.0278	0.6177E 00	0.1226E 01	0.6843E 00	0.9693E 00	0.8156E 00	0.5580E 00	0.4394E-00	0.1000E 01
0.0333	0.6336E 00	0.1217E 01	0.6993E 00	0.9701E 00	0.8220E 00	0.5746E 00	0.4525E-00	0.1000E 01
0.0389	0.6470E 00	0.1209E 01	0.7118E 00	0.9710E 00	0.8272E 00	0.5887E 00	0.4641E-00	0.1000E 01
0.0444	0.6583E 00	0.1203E 01	0.7222E 00	0.9717E 00	0.8317E 00	0.6005E 00	0.4742E-00	0.1000E 01
0.0500	0.6674E 00	0.1197E 01	0.7306E 00	0.9723E 00	0.8355E 00	0.6102E 00	0.4828E-00	0.1000E 01
0.0556	0.6753E 00	0.1193E 01	0.7379E 00	0.9729E 00	0.8386E 00	0.6186E 00	0.4903E-00	0.1000E 01
0.0833	0.7068E 00	0.1175E 01	0.7664E 00	0.9755E 00	0.8515E 00	0.6524E 00	0.5220E 00	0.1000E 01
0.1111	0.7324E 00	0.1160E 01	0.7891E 00	0.9776E 00	0.8625E 00	0.6804E 00	0.5500E 00	0.1000E 01
0.1389	0.7546E 00	0.1147E 01	0.8084E 00	0.9794E 00	0.8723E 00	0.7049E 00	0.5759E 00	0.1000E 01
0.1667	0.7733E 00	0.1136E 01	0.8245E 00	0.9810E 00	0.8808E 00	0.7260E 00	0.5993E 00	0.1000E 01
0.1944	0.7925E 00	0.1124E 01	0.8406E 00	0.9826E 00	0.8897E 00	0.7477E 00	0.6243E 00	0.1000E 01
0.2222	0.8085E 00	0.1115E 01	0.8540E 00	0.9839E 00	0.8973E 00	0.7661E 00	0.6463E 00	0.1000E 01
0.2500	0.8242E 00	0.1105E 01	0.8669E 00	0.9852E 00	0.9049E 00	0.7842E 00	0.6688E 00	0.1000E 01
0.2778	0.8387E 00	0.1097E 01	0.8787E 00	0.9865E 00	0.9121E 00	0.8012E 00	0.6906E 00	0.1000E 01
0.3056	0.8514E 00	0.1089E 01	0.8889E 00	0.9875E 00	0.9185E 00	0.8162E 00	0.7103E 00	0.1000E 01
0.3333	0.8639E 00	0.1081E 01	0.8988E 00	0.9886E 00	0.9248E 00	0.8310E 00	0.7304E 00	0.1000E 01
0.3611	0.8761E 00	0.1074E 01	0.9085E 00	0.9896E 00	0.9312E 00	0.8457E 00	0.7508E 00	0.1000E 01
0.3889	0.8878E 00	0.1067E 01	0.9176E 00	0.9906E 00	0.9373E 00	0.8598E 00	0.7710E 00	0.1000E 01
0.4167	0.8986E 00	0.1061E 01	0.9259E 00	0.9915E 00	0.9430E 00	0.8729E 00	0.7901E 00	0.1000E 01
0.4444	0.9096E 00	0.1054E 01	0.9343E 00	0.9925E 00	0.9489E 00	0.8864E 00	0.8103E 00	0.1000E 01
0.4722	0.9198E 00	0.1048E 01	0.9420E 00	0.9933E 00	0.9545E 00	0.8989E 00	0.8294E 00	0.1000E 01
0.5000	0.9291E 00	0.1042E 01	0.9490E 00	0.9941E 00	0.9596E 00	0.9104E 00	0.8474E 00	0.1000E 01
0.5278	0.9390E 00	0.1036E 01	0.9564E 00	0.9949E 00	0.9651E 00	0.9228E 00	0.8671E 00	0.1000E 01
0.5556	0.9495E 00	0.1030E 01	0.9641E 00	0.9958E 00	0.9710E 00	0.9359E 00	0.8885E 00	0.1000E 01
0.5833	0.9578E 00	0.1025E 01	0.9702E 00	0.9965E 00	0.9757E 00	0.9464E 00	0.9059E 00	0.1000E 01
0.6111	0.9660E 00	0.1020E 01	0.9762E 00	0.9972E 00	0.9804E 00	0.9568E 00	0.9236E 00	0.1000E 01
0.6389	0.9728E 00	0.1016E 01	0.9811E 00	0.9978E 00	0.9843E 00	0.9655E 00	0.9384E 00	0.1000E 01
0.6667	0.9782E 00	0.1013E 01	0.9850E 00	0.9982E 00	0.9875E 00	0.9724E 00	0.9504E 00	0.1000E 01
0.6944	0.9833E 00	0.1010E 01	0.9886E 00	0.9986E 00	0.9904E 00	0.9788E 00	0.9618E 00	0.1000E 01
0.7222	0.9876E 00	0.1007E 01	0.9917E 00	0.9990E 00	0.9929E 00	0.9844E 00	0.9717E 00	0.1000E 01
0.7500	0.9909E 00	0.1005E 01	0.9940E 00	0.9993E 00	0.9949E 00	0.9887E 00	0.9794E 00	0.1000E 01
0.7778	0.9936E 00	0.1004E 01	0.9959E 00	0.9995E 00	0.9965E 00	0.9921E 00	0.9855E 00	0.1000E 01
0.8056	0.9956E 00	0.1003E 01	0.9973E 00	0.9997E 00	0.9976E 00	0.9947E 00	0.9902E 00	0.1000E 01
0.8333	0.9972E 00	0.1002E 01	0.9985E 00	0.9998E 00	0.9986E 00	0.9968E 00	0.9941E 00	0.1000E 01
0.8611	0.9979E 00	0.1001E 01	0.9989E 00	0.9999E 00	0.9990E 00	0.9977E 00	0.9956E 00	0.1000E 01
0.8889	0.9985E 00	0.1001E 01	0.9994E 00	0.9999E 00	0.9994E 00	0.9985E 00	0.9972E 00	0.1000E 01
0.9167	0.9989E 00	0.1001E 01	0.9996E 00	0.9999E 00	0.9996E 00	0.9990E 00	0.9980E 00	0.1000E 01
0.9444	0.9992E 00	0.1000E 01	0.9995E 00	1.0000E 00	0.9998E 00	0.9994E 00	0.9987E 00	0.1000E 01
0.9722	0.9995E 00	0.1000E 01	0.1000E 01	1.0000E 00	1.0000E 00	0.9998E 00	0.9995E 00	0.1000E 01
1.0000	0.9997E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	1.0000E 00	0.1000E 01

TABLE V - CONTINUED.

(b) $M_\infty = 1.61$ STATION 2 $T_w/T_\delta = 1.422$

$\delta = 0.800$ IN $M_\delta = 1.589$ $T_\delta = 364.6$ °R $U_\delta = 1487$ FT/SEC $T_{T_\delta} = 548.6$ °R

$\rho_\delta = 1.482 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.204$ SLUGS/FT²-SEC $P_\delta = 927.48$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1423E 01	0.	0.9436E 00	0.7328E 00	0.	0.2494E-00	0.1042E 01
0.0062	0.4763E-00	0.1298E 01	0.5432E 00	0.9615E 00	0.8031E 00	0.4362E-00	0.3648E-00	0.1042E 01
0.0125	0.5273E 00	0.1270E 01	0.5944E 00	0.9628E 00	0.8203E 00	0.4875E-00	0.3949E-00	0.1042E 01
0.0187	0.5574E 00	0.1254E 01	0.6242E 00	0.9641E 00	0.8308E 00	0.5186E 00	0.4151E-00	0.1041E 01
0.0250	0.5782E 00	0.1243E 01	0.6445E 00	0.9652E 00	0.8382E 00	0.5401E 00	0.4301E-00	0.1041E 01
0.0312	0.5928E 00	0.1235E 01	0.6587E 00	0.9661E 00	0.8434E 00	0.5555E 00	0.4413E-00	0.1041E 01
0.0375	0.6063E 00	0.1227E 01	0.6716E 00	0.9668E 00	0.8484E 00	0.5697E 00	0.4519E-00	0.1041E 01
0.0437	0.6173E 00	0.1221E 01	0.6821E 00	0.9676E 00	0.8524E 00	0.5814E 00	0.4610E-00	0.1040E 01
0.0500	0.6261E 00	0.1216E 01	0.6905E 00	0.9683E 00	0.8555E 00	0.5907E 00	0.4684E-00	0.1040E 01
0.0562	0.6349E 00	0.1211E 01	0.6986E 00	0.9686E 00	0.8589E 00	0.5999E 00	0.4756E-00	0.1040E 01
0.0625	0.6423E 00	0.1207E 01	0.7057E 00	0.9693E 00	0.8616E 00	0.6079E 00	0.4822E-00	0.1040E 01
0.0937	0.6749E 00	0.1189E 01	0.7359E 00	0.9720E 00	0.8734E 00	0.6427E 00	0.5126E 00	0.1038E 01
0.1250	0.7022E 00	0.1174E 01	0.7608E 00	0.9744E 00	0.8837E 00	0.6723E 00	0.5402E 00	0.1037E 01
0.1562	0.7281E 00	0.1159E 01	0.7839E 00	0.9766E 00	0.8938E 00	0.7005E 00	0.5683E 00	0.1036E 01
0.1875	0.7505E 00	0.1146E 01	0.8035E 00	0.9785E 00	0.9026E 00	0.7252E 00	0.5942E 00	0.1034E 01
0.2187	0.7709E 00	0.1135E 01	0.8211E 00	0.9803E 00	0.9108E 00	0.7477E 00	0.6191E 00	0.1033E 01
0.2500	0.7889E 00	0.1124E 01	0.8365E 00	0.9819E 00	0.9181E 00	0.7679E 00	0.6424E 00	0.1032E 01
0.2812	0.8050E 00	0.1115E 01	0.8499E 00	0.9833E 00	0.9246E 00	0.7858E 00	0.6639E 00	0.1030E 01
0.3125	0.8190E 00	0.1106E 01	0.8623E 00	0.9845E 00	0.9308E 00	0.8025E 00	0.6848E 00	0.1029E 01
0.3437	0.8346E 00	0.1097E 01	0.8743E 00	0.9858E 00	0.9368E 00	0.8189E 00	0.7060E 00	0.1028E 01
0.3750	0.8475E 00	0.1090E 01	0.8347E 00	0.9869E 00	0.9422E 00	0.8334E 00	0.7253E 00	0.1026E 01
0.4062	0.8617E 00	0.1081E 01	0.8961E 00	0.9882E 00	0.9482E 00	0.8495E 00	0.7474E 00	0.1025E 01
0.4375	0.8734E 00	0.1074E 01	0.9054E 00	0.9892E 00	0.9531E 00	0.8628E 00	0.7662E 00	0.1024E 01
0.4687	0.8857E 00	0.1067E 01	0.9150E 00	0.9903E 00	0.9583E 00	0.8768E 00	0.7866E 00	0.1022E 01
0.5000	0.8972E 00	0.1060E 01	0.9239E 00	0.9913E 00	0.9632E 00	0.8898E 00	0.8061E 00	0.1021E 01
0.5312	0.9085E 00	0.1054E 01	0.9326E 00	0.9922E 00	0.9681E 00	0.9027E 00	0.8259E 00	0.1020E 01
0.5625	0.9197E 00	0.1047E 01	0.9412E 00	0.9932E 00	0.9729E 00	0.9156E 00	0.8461E 00	0.1019E 01
0.5937	0.9303E 00	0.1041E 01	0.9495E 00	0.9942E 00	0.9778E 00	0.9283E 00	0.8667E 00	0.1017E 01
0.6250	0.9413E 00	0.1034E 01	0.9577E 00	0.9951E 00	0.9826E 00	0.9410E 00	0.8876E 00	0.1016E 01
0.6562	0.9519E 00	0.1028E 01	0.9653E 00	0.9960E 00	0.9871E 00	0.9527E 00	0.9075E 00	0.1015E 01
0.6875	0.9607E 00	0.1023E 01	0.9717E 00	0.9967E 00	0.9908E 00	0.9626E 00	0.9248E 00	0.1013E 01
0.7187	0.9694E 00	0.1018E 01	0.9780E 00	0.9975E 00	0.9944E 00	0.9725E 00	0.9425E 00	0.1012E 01
0.7500	0.9761E 00	0.1014E 01	0.9828E 00	0.9981E 00	0.9970E 00	0.9798E 00	0.9560E 00	0.1011E 01
0.7812	0.9827E 00	0.1010E 01	0.9876E 00	0.9986E 00	0.9995E 00	0.9870E 00	0.9696E 00	0.1009E 01
0.8125	0.9874E 00	0.1007E 01	0.9910E 00	0.9990E 00	0.1001E 01	0.9918E 00	0.9790E 00	0.1008E 01
0.8437	0.9901E 00	0.1006E 01	0.9929E 00	0.9992E 00	0.1001E 01	0.9940E 00	0.9839E 00	0.1007E 01
0.8750	0.9934E 00	0.1004E 01	0.9953E 00	0.9995E 00	0.1002E 01	0.9970E 00	0.9904E 00	0.1005E 01
0.9062	0.9955E 00	0.1003E 01	0.9967E 00	0.9997E 00	0.1002E 01	0.9984E 00	0.9939E 00	0.1004E 01
0.9375	0.9969E 00	0.1002E 01	0.9977E 00	0.9998E 00	0.1001E 01	0.9989E 00	0.9959E 00	0.1003E 01
0.9687	0.9983E 00	0.1001E 01	0.9987E 00	0.9999E 00	0.1001E 01	0.9994E 00	0.9979E 00	0.1001E 01
1.0000	0.9997E 00	0.1000E 01	0.9998E 00	0.1000E 01	0.1000E 01	0.9999E 00	0.9999E 00	0.1000E 01

TABLE V - CONTINUED.

(c) $M_\infty = 1.61$ STATION 6 $T_w/T_\delta = 1.374$

$\delta = 0.700$ IN $M_\delta = 1.492$ $T_\delta = 379.0$ °R $U_\delta = 1424$ FT/SEC $T_{T_\delta} = 547.9$ °R

$\rho_\delta = 1.639 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.333$ SLUGS/FT²-SEC $P_\delta = 1065.74$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1375E 01	0.	0.9512E 00	0.7547E 00	0.	0.2860E-00	0.1038E 01
0.0071	0.4943E-00	0.1259E 01	0.5544E 00	0.9655E 00	0.8241E 00	0.4570E-00	0.4104E-00	0.1038E 01
0.0143	0.5555E 00	0.1229E 01	0.6155E 00	0.9668E 00	0.8440E 00	0.5197E 00	0.4485E-00	0.1037E 01
0.0214	0.5869E 00	0.1213E 01	0.6462E 00	0.9679E 00	0.8547E 00	0.5525E 00	0.4708E-00	0.1037E 01
0.0286	0.6091E 00	0.1202E 01	0.6676E 00	0.9688E 00	0.8624E 00	0.5760E 00	0.4878E-00	0.1037E 01
0.0357	0.6256E 00	0.1194E 01	0.6833E 00	0.9697E 00	0.8681E 00	0.5934E 00	0.5011E 00	0.1037E 01
0.0429	0.6399E 00	0.1187E 01	0.6969E 00	0.9706E 00	0.8730E 00	0.6087E 00	0.5131E 00	0.1036E 01
0.0500	0.6521E 00	0.1181E 01	0.7083E 00	0.9713E 00	0.8773E 00	0.6216E 00	0.5237E 00	0.1036E 01
0.0571	0.6621E 00	0.1176E 01	0.7177E 00	0.9721E 00	0.8807E 00	0.6324E 00	0.5327E 00	0.1036E 01
0.0643	0.6693E 00	0.1172E 01	0.7245E 00	0.9728E 00	0.8830E 00	0.6400E 00	0.5392E 00	0.1035E 01
0.0714	0.6760E 00	0.1169E 01	0.7307E 00	0.9734E 00	0.8852E 00	0.6471E 00	0.5451E 00	0.1035E 01
0.1071	0.7039E 00	0.1156E 01	0.7567E 00	0.9763E 00	0.8939E 00	0.6766E 00	0.5720E 00	0.1034E 01
0.1429	0.7282E 00	0.1144E 01	0.7786E 00	0.9782E 00	0.9023E 00	0.7028E 00	0.5970E 00	0.1032E 01
0.1786	0.7502E 00	0.1133E 01	0.7982E 00	0.9799E 00	0.9101E 00	0.7267E 00	0.6211E 00	0.1031E 01
0.2143	0.7696E 00	0.1123E 01	0.8153E 00	0.9815E 00	0.9170E 00	0.7479E 00	0.6435E 00	0.1030E 01
0.2500	0.7881E 00	0.1113E 01	0.8313E 00	0.9829E 00	0.9237E 00	0.7681E 00	0.6657E 00	0.1028E 01
0.2857	0.8061E 00	0.1104E 01	0.8466E 00	0.9844E 00	0.9304E 00	0.7880E 00	0.6884E 00	0.1027E 01
0.3214	0.8228E 00	0.1095E 01	0.8607E 00	0.9857E 00	0.9366E 00	0.8064E 00	0.7104E 00	0.1026E 01
0.3571	0.8383E 00	0.1087E 01	0.8737E 00	0.9869E 00	0.9424E 00	0.8237E 00	0.7317E 00	0.1024E 01
0.3929	0.8544E 00	0.1078E 01	0.8869E 00	0.9882E 00	0.9486E 00	0.8417E 00	0.7545E 00	0.1023E 01
0.4286	0.8708E 00	0.1069E 01	0.9003E 00	0.9896E 00	0.9551E 00	0.8602E 00	0.7789E 00	0.1022E 01
0.4643	0.8876E 00	0.1061E 01	0.9138E 00	0.9909E 00	0.9619E 00	0.8793E 00	0.8050E 00	0.1020E 01
0.5000	0.9028E 00	0.1052E 01	0.9258E 00	0.9921E 00	0.9680E 00	0.8966E 00	0.8293E 00	0.1019E 01
0.5357	0.9169E 00	0.1045E 01	0.9369E 00	0.9933E 00	0.9737E 00	0.9127E 00	0.8529E 00	0.1018E 01
0.5714	0.9301E 00	0.1038E 01	0.9472E 00	0.9943E 00	0.9791E 00	0.9278E 00	0.8756E 00	0.1016E 01
0.6071	0.9425E 00	0.1031E 01	0.9568E 00	0.9953E 00	0.9841E 00	0.9419E 00	0.8975E 00	0.1015E 01
0.6429	0.9541E 00	0.1025E 01	0.9656E 00	0.9963E 00	0.9887E 00	0.9551E 00	0.9185E 00	0.1014E 01
0.6786	0.9629E 00	0.1020E 01	0.9722E 00	0.9970E 00	0.9920E 00	0.9648E 00	0.9345E 00	0.1012E 01
0.7143	0.9716E 00	0.1015E 01	0.9788E 00	0.9977E 00	0.9952E 00	0.9745E 00	0.9508E 00	0.1011E 01
0.7500	0.9790E 00	0.1011E 01	0.9843E 00	0.9982E 00	0.9978E 00	0.9826E 00	0.9645E 00	0.1009E 01
0.7857	0.9850E 00	0.1008E 01	0.9888E 00	0.9987E 00	0.9997E 00	0.9888E 00	0.9757E 00	0.1008E 01
0.8214	0.9884E 00	0.1006E 01	0.9913E 00	0.9990E 00	0.1000E 01	0.9918E 00	0.9816E 00	0.1007E 01
0.8571	0.9915E 00	0.1005E 01	0.9936E 00	0.9992E 00	0.1000E 01	0.9944E 00	0.9867E 00	0.1005E 01
0.8929	0.9952E 00	0.1003E 01	0.9963E 00	0.9995E 00	0.1001E 01	0.9978E 00	0.9933E 00	0.1004E 01
0.9286	0.9970E 00	0.1002E 01	0.9976E 00	0.9997E 00	0.1001E 01	0.9987E 00	0.9958E 00	0.1003E 01
0.9643	0.9988E 00	0.1001E 01	0.9989E 00	0.9998E 00	0.1000E 01	0.9996E 00	0.9983E 00	0.1001E 01
1.0000	0.1000E 01	0.1000E 01	1.0000E 00	0.9999E 00	0.9997E 00	0.1000E 01	0.1000E 01	0.1000E 01

TABLE V - CONTINUED.

(d) M_∞ = 1.61 STATION 8 T_w/T_δ = 1.372

δ = 0.650 IN M_δ = 1.478 T_δ = 381.0 °R U_δ = 1414 FT/SEC T_{T_δ} = 547.4 °R

ρ_δ = 1.65 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 2.332 SLUGS/FT² - SEC P_δ = 1078.52 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1372E 01	0.	0.9552E 00	0.7672E 00	0.	0.2962E-00	0.1053E 01
0.0077	0.5543E 00	0.1231E 01	0.6156E 00	0.9724E 00	0.8237E 00	0.5074E 00	0.4438E-00	0.1015E 01
0.0154	0.5365E 00	0.1215E 01	0.6465E 00	0.9728E 00	0.8348E 00	0.5399E 00	0.4658E-00	0.1015E 01
0.0231	0.6137E 00	0.1201E 01	0.6724E 00	0.9732E 00	0.8446E 00	0.5682E 00	0.4863E-00	0.1014E 01
0.0308	0.6352E 00	0.1189E 01	0.6927E 00	0.9737E 00	0.8527E 00	0.5909E 00	0.5036E 00	0.1014E 01
0.0385	0.6523E 00	0.1180E 01	0.7086E 00	0.9741E 00	0.8592E 00	0.6091E 00	0.5181E 00	0.1014E 01
0.0462	0.6656E 00	0.1173E 01	0.7208E 00	0.9745E 00	0.8643E 00	0.6233E 00	0.5298E 00	0.1014E 01
0.0538	0.6760E 00	0.1168E 01	0.7304E 00	0.9750E 00	0.8682E 00	0.6344E 00	0.5393E 00	0.1014E 01
0.0615	0.6845E 00	0.1163E 01	0.7382E 00	0.9755E 00	0.8712E 00	0.6435E 00	0.5469E 00	0.1014E 01
0.0692	0.6913E 00	0.1159E 01	0.7448E 00	0.9756E 00	0.8743E 00	0.6515E 00	0.5539E 00	0.1014E 01
0.0769	0.6984E 00	0.1156E 01	0.7508E 00	0.9761E 00	0.8766E 00	0.6585E 00	0.5603E 00	0.1014E 01
0.1154	0.7272E 00	0.1142E 01	0.7770E 00	0.9783E 00	0.8871E 00	0.6896E 00	0.5895E 00	0.1013E 01
0.1538	0.7520E 00	0.1129E 01	0.7991E 00	0.9803E 00	0.8963E 00	0.7166E 00	0.6165E 00	0.1012E 01
0.1923	0.7733E 00	0.1119E 01	0.8178E 00	0.9819E 00	0.9045E 00	0.7401E 00	0.6411E 00	0.1012E 01
0.2308	0.7913E 00	0.1109E 01	0.8338E 00	0.9834E 00	0.9117E 00	0.7605E 00	0.6634E 00	0.1011E 01
0.2692	0.8094E 00	0.1100E 01	0.8488E 00	0.9848E 00	0.9187E 00	0.7802E 00	0.6858E 00	0.1011E 01
0.3077	0.8273E 00	0.1091E 01	0.8640E 00	0.9862E 00	0.9259E 00	0.8004E 00	0.7096E 00	0.1010E 01
0.3462	0.8448E 00	0.1082E 01	0.8786E 00	0.9876E 00	0.9332E 00	0.8203E 00	0.7340E 00	0.1010E 01
0.3846	0.8620E 00	0.1073E 01	0.8927E 00	0.9890E 00	0.9405E 00	0.8400E 00	0.7590E 00	0.1009E 01
0.4231	0.8783E 00	0.1064E 01	0.9064E 00	0.9903E 00	0.9477E 00	0.8594E 00	0.7844E 00	0.1008E 01
0.4615	0.8941E 00	0.1056E 01	0.9186E 00	0.9915E 00	0.9544E 00	0.8772E 00	0.8086E 00	0.1008E 01
0.5000	0.9091E 00	0.1048E 01	0.9306E 00	0.9927E 00	0.9611E 00	0.8948E 00	0.8333E 00	0.1007E 01
0.5385	0.9236E 00	0.1040E 01	0.9419E 00	0.9939E 00	0.9676E 00	0.9118E 00	0.8578E 00	0.1007E 01
0.5769	0.9364E 00	0.1034E 01	0.9519E 00	0.9949E 00	0.9734E 00	0.9270E 00	0.8803E 00	0.1006E 01
0.6154	0.9490E 00	0.1027E 01	0.9616E 00	0.9959E 00	0.9791E 00	0.9420E 00	0.9032E 00	0.1006E 01
0.6538	0.9608E 00	0.1021E 01	0.9706E 00	0.9969E 00	0.9846E 00	0.9560E 00	0.9251E 00	0.1005E 01
0.6923	0.9707E 00	0.1015E 01	0.9781E 00	0.9977E 00	0.9891E 00	0.9679E 00	0.9442E 00	0.1005E 01
0.7308	0.9790E 00	0.1011E 01	0.9843E 00	0.9983E 00	0.9928E 00	0.9777E 00	0.9602E 00	0.1004E 01
0.7692	0.9849E 00	0.1008E 01	0.9887E 00	0.9988E 00	0.9953E 00	0.9845E 00	0.9717E 00	0.1003E 01
0.8077	0.9893E 00	0.1005E 01	0.9924E 00	0.9992E 00	0.9973E 00	0.9902E 00	0.9813E 00	0.1003E 01
0.8462	0.9931E 00	0.1004E 01	0.9948E 00	0.9994E 00	0.9985E 00	0.9937E 00	0.9875E 00	0.1002E 01
0.8846	0.9954E 00	0.1002E 01	0.9965E 00	0.9996E 00	0.9991E 00	0.9960E 00	0.9917E 00	0.1002E 01
0.9231	0.9970E 00	0.1001E 01	0.9977E 00	0.9997E 00	0.9994E 00	0.9975E 00	0.9946E 00	0.1001E 01
0.9615	0.9989E 00	0.1000E 01	0.9991E 00	0.9999E 00	0.9999E 00	0.9994E 00	0.9982E 00	0.1001E 01
1.0000	0.9999E 00	0.9999E 00	0.9998E 00	1.0000E 00	0.9998E 00	0.1000E 01	0.9997E 00	1.0000E 00

TABLE V - CONTINUED.

(*) $M_\infty = 1.61$ STATION 10 $T_w/T_\delta = 1.347$

$\delta = 0.625$ IN $M_\delta = 1.431$ $T_\delta = 389.8$ °R $U_\delta = 1385$ FT/SEC $T_{T_\delta} = 549.5$ °R

$\rho_\delta = 1.718 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.378$ SLUGS/FT²-SEC $P_\delta = 1148.92$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1347E 01	0.	0.9558E 00	0.7621E 00	0.	0.3088E-00	0.1027E 01
0.0080	0.5336E 00	0.1228E 01	0.5912E 00	0.9729E 00	0.8358E 00	0.4944E-00	0.4542E-00	0.1027E 01
0.0160	0.5871E 00	0.1203E 01	0.6437E 00	0.9736E 00	0.8534E 00	0.5496E 00	0.4900E-00	0.1027E 01
0.0240	0.6169E 00	0.1188E 01	0.6723E 00	0.9742E 00	0.8638E 00	0.5810E 00	0.5124E 00	0.1026E 01
0.0320	0.6379E 00	0.1178E 01	0.6921E 00	0.9747E 00	0.8711E 00	0.6033E 00	0.5293E 00	0.1026E 01
0.0400	0.6541E 00	0.1170E 01	0.7074E 00	0.9753E 00	0.8769E 00	0.6206E 00	0.5429E 00	0.1026E 01
0.0480	0.6670E 00	0.1164E 01	0.7193E 00	0.9758E 00	0.8814E 00	0.6344E 00	0.5541E 00	0.1026E 01
0.0560	0.6774E 00	0.1159E 01	0.7290E 00	0.9763E 00	0.8850E 00	0.6455E 00	0.5635E 00	0.1026E 01
0.0640	0.6856E 00	0.1155E 01	0.7365E 00	0.9768E 00	0.8878E 00	0.6543E 00	0.5709E 00	0.1025E 01
0.0720	0.6927E 00	0.1151E 01	0.7431E 00	0.9773E 00	0.8902E 00	0.6619E 00	0.5776E 00	0.1025E 01
0.0800	0.7001E 00	0.1148E 01	0.7498E 00	0.9775E 00	0.8929E 00	0.6699E 00	0.5843E 00	0.1025E 01
0.1200	0.7297E 00	0.1134E 01	0.7768E 00	0.9797E 00	0.9028E 00	0.7017E 00	0.6137E 00	0.1024E 01
0.1600	0.7551E 00	0.1122E 01	0.7996E 00	0.9815E 00	0.9116E 00	0.7293E 00	0.6408E 00	0.1023E 01
0.2000	0.7772E 00	0.1111E 01	0.8191E 00	0.9832E 00	0.9194E 00	0.7535E 00	0.6657E 00	0.1022E 01
0.2400	0.7973E 00	0.1101E 01	0.8365E 00	0.9846E 00	0.9265E 00	0.7755E 00	0.6895E 00	0.1021E 01
0.2800	0.8144E 00	0.1093E 01	0.8512E 00	0.9859E 00	0.9326E 00	0.7943E 00	0.7105E 00	0.1020E 01
0.3200	0.8315E 00	0.1085E 01	0.8658E 00	0.9872E 00	0.9388E 00	0.8133E 00	0.7327E 00	0.1018E 01
0.3600	0.8488E 00	0.1076E 01	0.8802E 00	0.9885E 00	0.9453E 00	0.8326E 00	0.7558E 00	0.1017E 01
0.4000	0.8661E 00	0.1067E 01	0.8946E 00	0.9898E 00	0.9519E 00	0.8571E 00	0.7802E 00	0.1016E 01
0.4400	0.8830E 00	0.1059E 01	0.9085E 00	0.9911E 00	0.9584E 00	0.8713E 00	0.8050E 00	0.1015E 01
0.4800	0.9004E 00	0.1050E 01	0.9225E 00	0.9924E 00	0.9653E 00	0.8911E 00	0.8315E 00	0.1014E 01
0.5200	0.9166E 00	0.1042E 01	0.9355E 00	0.9937E 00	0.9718E 00	0.9097E 00	0.8573E 00	0.1013E 01
0.5600	0.9316E 00	0.1035E 01	0.9473E 00	0.9948E 00	0.9778E 00	0.9269E 00	0.8818E 00	0.1012E 01
0.6000	0.9456E 00	0.1028E 01	0.9583E 00	0.9959E 00	0.9835E 00	0.9431E 00	0.9056E 00	0.1011E 01
0.6400	0.9584E 00	0.1021E 01	0.9682E 00	0.9969E 00	0.9887E 00	0.9578E 00	0.9280E 00	0.1010E 01
0.6800	0.9690E 00	0.1016E 01	0.9764E 00	0.9977E 00	0.9928E 00	0.9700E 00	0.9469E 00	0.1009E 01
0.7200	0.9779E 00	0.1011E 01	0.9832E 00	0.9983E 00	0.9961E 00	0.9800E 00	0.9630E 00	0.1008E 01
0.7600	0.9854E 00	0.1007E 01	0.9889E 00	0.9989E 00	0.9988E 00	0.9883E 00	0.9767E 00	0.1007E 01
0.8000	0.9896E 00	0.1005E 01	0.9920E 00	0.9992E 00	0.9999E 00	0.9925E 00	0.9840E 00	0.1005E 01
0.8400	0.9932E 00	0.1004E 01	0.9947E 00	0.9995E 00	0.1001E 01	0.9959E 00	0.9901E 00	0.1004E 01
0.8800	0.9958E 00	0.1002E 01	0.9967E 00	0.9997E 00	0.1001E 01	0.9981E 00	0.9943E 00	0.1003E 01
0.9200	0.9974E 00	0.1001E 01	0.9979E 00	0.9998E 00	0.1001E 01	0.9991E 00	0.9965E 00	0.1002E 01
0.9600	0.9991E 00	0.1001E 01	0.9991E 00	0.9999E 00	0.1000E 01	0.1000E 01	0.9987E 00	0.1001E 01
1.0000	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	0.9997E 00	0.1000E 01	0.9996E 00	0.1000E 01

TABLE V - CONTINUED.

(f) $M_\infty = 3.30$ STATION 0 $T_w/T_\delta = 3.011$

$\delta = 0.825$ IN $M_\delta = 3.400$ $T_\delta = 171.6$ °R $U_\delta = 2183$ FT/SEC $T_{T_\delta} = 568.3$ °R

$\rho_\delta = 0.4760 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.039$ SLUGS/FT² - SEC $P_\delta = 140.14$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3012E 01	C.	0.9094E CC	0.3320E-CO	C.	0.1512E-01	0.1000E 01
0.0061	0.3544E-00	0.2336E 01	0.5415E 00	0.9101E 00	0.4280E-CO	0.2318E-00	0.3688E-01	0.1000E 01
0.0121	0.4072E-00	0.2180E 01	C.6012E 00	0.9108E 00	0.4585E-CO	0.2757E-00	0.4706E-01	0.1000E 01
0.0182	0.4439E-00	0.2074E 01	0.6392E 00	0.9115E 00	0.4821E-00	0.3082E-00	0.5624E-01	0.1000E 01
0.0242	0.4693E-00	0.2002E 01	0.6638E CC	0.9121E 00	0.4995E-CO	0.3316E-00	0.6382E-01	0.1000E 01
0.0303	0.4865E-00	0.1954E 01	0.6800E 00	0.9129E 00	0.5116E CO	0.3479E-00	0.6963E-01	0.1000E 01
0.0364	0.5007E 00	0.1916E 01	0.6930E 00	0.9140E 00	0.5218E 00	0.3617E-00	0.7489E-01	0.1000E 01
0.0424	0.5122E 00	0.1886E 01	0.7035E 00	0.9152E 00	0.5300E CO	C.3729E-00	0.7947E-01	0.1000E 01
0.0485	0.5217E 00	0.1863E 01	0.7120E 00	0.9166E 0C	0.5366E CC	C.3821E-00	0.8344E-01	0.1000E 01
0.0545	0.5305E 00	0.1842E 01	0.7200E 00	0.9182E 00	0.5428E CO	C.3908E-00	0.8737E-01	0.1000E 01
0.0606	0.5382E 00	0.1827E 01	0.7275E 00	0.9213E 00	0.5471E CO	0.3981E-00	0.9092E-01	0.1000E 01
0.0909	0.5694E 00	0.1766E 01	0.7566E 00	0.9330E CC	0.5662E CO	C.4284E-00	0.1071E-00	0.1000E 01
0.1212	0.5928E 00	0.1719E 01	0.7771E 00	0.9405E 0C	0.5818E CO	C.4521E-00	0.1212E-00	0.1000E 01
0.1515	0.6137E 00	0.1675E 01	0.7942E 00	0.9463E 00	0.5968E CO	0.4740E-00	0.1354E-00	0.1000E 01
0.1818	0.6314E 00	0.1637E 01	0.8077E 00	0.9498E 00	0.6108E 00	0.4934E-00	0.1487E-00	0.1000E 01
0.2121	0.6489E 00	0.1599E 01	0.8205E CC	0.9529E 0C	0.6253E 00	C.5131E 00	0.1633E-00	0.1000E C1
0.2424	0.6654E 00	0.1564E 01	0.8321E 00	0.9556E 0C	0.6393E CO	0.5320E 00	0.1782E-00	0.1000E 01
0.2727	0.6823E 00	0.1529E 01	0.8436E 00	0.9585E 00	0.6540E CO	0.5518E 00	0.1950E-00	0.1000E 01
0.3030	0.6980E 00	0.1497E 01	0.8539E 00	0.9610E 00	0.6681E 00	0.5705E 00	0.2120E-00	0.1000E 01
0.3333	0.7136E 00	0.1465E 01	0.8638E 00	0.9635E CC	0.6823E 00	C.5894E 00	0.2303E-00	0.1000E C1
0.3636	0.7289E 00	0.1435E 01	0.8732E 00	0.9658E CC	0.6965E CO	C.6083E 00	0.2497E-00	0.1000E 01
0.3939	0.7467E 00	0.1401E 01	0.8838E 00	0.9685E 00	0.7135E CO	0.6307E 00	0.2744E-00	0.1000E 01
0.4242	0.7671E 00	0.1363E 01	0.8955E 00	0.9715E 00	0.7335E CO	0.6570E 00	0.3055E-00	0.1000E 01
0.4545	0.7821E 00	0.1336E 01	0.9038E 00	0.9737E 0C	0.7485E 00	C.6766E 00	0.3305E-00	0.1000E 01
0.4848	0.8016E 00	0.1301E 01	0.9142E 00	0.9764E 0C	0.7685E CO	0.7027E 00	0.3660E-00	0.1000E 01
0.5152	0.8183E 00	0.1272E 01	0.9228E 00	0.9786E 00	0.7860E 00	0.7254E 00	0.3992E-00	0.1000E 01
0.5455	0.8346E 00	0.1244E 01	0.9309E 00	0.9808E 00	0.8035E 00	0.7481E 00	0.4345E-00	0.1000E 01
0.5758	0.8529E 00	0.1214E 01	0.9397E CC	0.9832E 0C	0.8235E CO	C.7739E 00	0.4775E-00	0.1000E 01
0.6061	0.8686E 00	0.1189E 01	0.9470E 00	0.9851E 00	0.8410E CO	0.7965E 00	0.5176E 00	0.1000E 01
0.6364	0.8840E 00	0.1165E 01	0.9539E 00	0.9870E 00	0.8585E CO	0.8190E 00	0.5600E 00	0.1000E 01
0.6667	0.8970E 00	0.1145E 01	0.9596E 00	0.9886E 00	0.8735E CO	0.8383E 00	0.5983E 00	0.1000E C1
0.6970	0.9098E 00	0.1125E 01	C.9651E CC	0.9901E 00	0.8884E CO	C.8575E 00	0.6384E 00	0.1000E 01
0.7273	0.9203E 00	0.1110E 01	0.9695E 00	0.9913E C0	0.9009E CO	0.8735E 00	0.6733E 00	0.1000E 01
0.7576	0.9287E 00	0.1098E 01	0.9729E 00	0.9923E 00	0.9109E 00	0.8863E 00	0.7021E 00	0.1000E 01
0.7879	0.9370E 00	0.1086E 01	0.9762E 00	0.9932E 00	0.9209E 00	0.8991E 00	0.7318E 00	0.1000E 01
0.8182	0.9451E 00	0.1074E 01	0.9794E 00	0.9941E 0C	0.9309E CO	0.9119E 00	0.7624E 00	0.1000E 01
0.8485	0.9523E 00	0.1064E 01	0.9822E 00	0.9949E 00	0.9397E CO	0.9231E 00	0.7900E 00	0.1000E 01
0.8788	0.9603E 00	0.1053E 01	0.9853E 00	0.9958E 00	0.9497E CO	0.9358E 00	0.8223E 00	0.1000E 01
0.9091	0.9713E 00	0.1038E 01	0.9895E 00	0.9969E 00	0.9634E CO	0.9533E 00	0.8683E 00	0.1000E 01
0.9394	0.9822E 00	0.1023E 01	0.9935E 00	0.9981E 00	0.9771E CO	C.9708E 00	0.9160E 00	0.1000E 01
0.9697	0.9939E 00	0.1008E 01	0.9977E 00	0.9993E 00	0.9921E CO	0.9899E 00	0.9702E 00	0.1000E 01
1.0000	0.1000E 01	0.9997E 00	0.9999E 00	0.9999E 00	0.1000E C1	0.1000E 01	0.1000E 01	0.1000E 01

TABLE V - CONTINUED.

(g) M_∞ = 3.30 STATION 2 T_w/T_δ = 2.855

δ = 0.925 IN M_δ = 3.269 T_δ = 161.3 °R U_δ = 2157 FT/SEC T_{T_δ} = 568.8 °R

ρ_δ = 0.4555 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 0.9826 SLUGS/FT²-SEC P_δ = 141.72 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2855E 01	0.	0.9161E 00	0.4682E-00	0.	0.2446E-01	0.1337E 01
0.0054	0.3066E-00	0.2389E 01	0.4740E-00	0.9146E 00	0.5587E 00	0.2648E-00	0.4633E-01	0.1335E 01
0.0108	0.3663E-00	0.2239E 01	0.5482E 00	0.9182E 00	0.5954E 00	0.3263E-00	0.5892E-01	0.1333E 01
0.0162	0.4059E-00	0.2138E 01	0.5946E 00	0.9214E 00	0.6226E 00	0.3695E-00	0.6998E-01	0.1331E 01
0.0216	0.4361E-00	0.2062E 01	0.6262E 00	0.9242E 00	0.6446E 00	0.4036E-00	0.8019E-01	0.1329E 01
0.0270	0.4600E-00	0.2002E 01	0.6510E 00	0.9269E 00	0.6627E 00	0.4314E-00	0.8957E-01	0.1327E 01
0.0324	0.4761E-00	0.1964E 01	0.6672E 00	0.9291E 00	0.6747E 00	0.4501E-00	0.9656E-01	0.1325E 01
0.0378	0.4900E-00	0.1931E 01	0.6810E 00	0.9314E 00	0.6850E 00	0.4665E-00	0.1031E-00	0.1323E 01
0.0432	0.5020E 00	0.1903E 01	0.6926E 00	0.9334E 00	0.6941E 00	0.4806E-00	0.1091E-00	0.1321E 01
0.0486	0.5127E 00	0.1880E 01	0.7030E 00	0.9357E 00	0.7018E 00	0.4933E-00	0.1149E-00	0.1319E 01
0.0541	0.5224E 00	0.1858E 01	0.7121E 00	0.9374E 00	0.7090E 00	0.5048E 00	0.1203E-00	0.1317E 01
0.0811	0.5621E 00	0.1769E 01	0.7476E 00	0.9444E 00	0.7395E 00	0.5528E 00	0.1456E-00	0.1308E 01
0.1081	0.5937E 00	0.1699E 01	0.7740E 00	0.9497E 00	0.7643E 00	0.5916E 00	0.1695E-00	0.1299E 01
0.1351	0.6214E 00	0.1640E 01	0.7960E 00	0.9543E 00	0.7864E 00	0.6259E 00	0.1939E-00	0.1290E 01
0.1622	0.6463E 00	0.1588E 01	0.8146E 00	0.9582E 00	0.8065E 00	0.6569E 00	0.2186E-00	0.1281E 01
0.1892	0.6679E 00	0.1544E 01	0.8301E 00	0.9615E 00	0.8236E 00	0.6836E 00	0.2424E-00	0.1272E 01
0.2162	0.6885E 00	0.1502E 01	0.8445E 00	0.9646E 00	0.8405E 00	0.7097E 00	0.2679E-00	0.1263E 01
0.2432	0.7091E 00	0.1463E 01	0.8578E 00	0.9675E 00	0.8568E 00	0.7349E 00	0.2949E-00	0.1254E 01
0.2703	0.7290E 00	0.1425E 01	0.8704E 00	0.9703E 00	0.8732E 00	0.7600E 00	0.3241E-00	0.1244E 01
0.2973	0.7491E 00	0.1388E 01	0.8827E 00	0.9731E 00	0.8900E 00	0.7855E 00	0.3564E-00	0.1235E 01
0.3243	0.7687E 00	0.1353E 01	0.8941E 00	0.9757E 00	0.9066E 00	0.8106E 00	0.3910E-00	0.1226E 01
0.3514	0.7881E 00	0.1319E 01	0.9051E 00	0.9782E 00	0.9232E 00	0.8355E 00	0.4282E-00	0.1217E 01
0.3784	0.8083E 00	0.1284E 01	0.9160E 00	0.9808E 00	0.9412E 00	0.8671E 00	0.4709E-00	0.1208E 01
0.4054	0.8263E 00	0.1254E 01	0.9254E 00	0.9830E 00	0.9565E 00	0.8850E 00	0.5117E 00	0.1199E 01
0.4324	0.8442E 00	0.1225E 01	0.9344E 00	0.9851E 00	0.9717E 00	0.9079E 00	0.5554E 00	0.1190E 01
0.4595	0.8629E 00	0.1195E 01	0.9435E 00	0.9872E 00	0.9883E 00	0.9324E 00	0.6054E 00	0.1181E 01
0.4865	0.8776E 00	0.1173E 01	0.9504E 00	0.9889E 00	0.9997E 00	0.9500E 00	0.6460E 00	0.1172E 01
0.5135	0.8932E 00	0.1149E 01	0.9575E 00	0.9906E 00	0.1012E 01	0.9692E 00	0.6925E 00	0.1163E 01
0.5405	0.9078E 00	0.1127E 01	0.9639E 00	0.9921E 00	0.1024E 01	0.9867E 00	0.7384E 00	0.1154E 01
0.5676	0.9204E 00	0.1109E 01	0.9693E 00	0.9934E 00	0.1033E 01	0.1001E 01	0.7794E 00	0.1145E 01
0.5946	0.9340E 00	0.1090E 01	0.9750E 00	0.9948E 00	0.1043E 01	0.1016E 01	0.8265E 00	0.1136E 01
0.6216	0.9457E 00	0.1073E 01	0.9798E 00	0.9959E 00	0.1050E 01	0.1029E 01	0.8679E 00	0.1127E 01
0.6486	0.9545E 00	0.1061E 01	0.9833E 00	0.9968E 00	0.1054E 01	0.1036E 01	0.8987E 00	0.1118E 01
0.6757	0.9624E 00	0.1050E 01	0.9864E 00	0.9975E 00	0.1056E 01	0.1041E 01	0.9263E 00	0.1109E 01
0.7027	0.9685E 00	0.1042E 01	0.9889E 00	0.9980E 00	0.1055E 01	0.1043E 01	0.9459E 00	0.1100E 01
0.7297	0.9707E 00	0.1039E 01	0.9896E 00	0.9981E 00	0.1050E 01	0.1039E 01	0.9482E 00	0.1091E 01
0.7568	0.9710E 00	0.1039E 01	0.9876E 00	0.9980E 00	0.1042E 01	0.1031E 01	0.9415E 00	0.1082E 01
0.7838	0.9693E 00	0.1041E 01	0.9899E 00	0.9978E 00	0.1031E 01	0.1019E 01	0.9260E 00	0.1073E 01
0.8108	0.9709E 00	0.1038E 01	0.9895E 00	0.9978E 00	0.1024E 01	0.1013E 01	0.9255E 00	0.1063E 01
0.8378	0.9738E 00	0.1034E 01	0.9906E 00	0.9980E 00	0.1019E 01	0.1010E 01	0.9306E 00	0.1054E 01
0.8649	0.9772E 00	0.1030E 01	0.9918E 00	0.9982E 00	0.1015E 01	0.1007E 01	0.9376E 00	0.1045E 01
0.8919	0.9816E 00	0.1024E 01	0.9934E 00	0.9986E 00	0.1012E 01	0.1005E 01	0.9494E 00	0.1036E 01
0.9189	0.9861E 00	0.1018E 01	0.9951E 00	0.9989E 00	0.1009E 01	0.1004E 01	0.9616E 00	0.1027E 01
0.9459	0.9906E 00	0.1012E 01	0.9967E 00	0.9992E 00	0.1006E 01	0.1003E 01	0.9740E 00	0.1018E 01
0.9730	0.9952E 00	0.1006E 01	0.9984E 00	0.9996E 00	0.1003E 01	0.1001E 01	0.9867E 00	0.1009E 01
1.0000	0.9999E 00	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	1.0000E 00	1.0000E 00	0.1000E 01

TABLE V - CONTINUED.

(h) $M_\infty = 3.30$ STATION 6 $T_w/T_\delta = 2.765$

$\delta = 0.750$ IN $M_\delta = 3.197$ $T_\delta = 186.8$ °R $U_\delta = 2141$ FT/SEC $T_{T_\delta} = 568.5$ °R

$\rho_\delta = 0.5552 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.189$ SLUGS/FT²-SEC $P_\delta = 177.94$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2765E 01	0.	0.9087E 00	0.4434E-00	0.	0.2494E-01	0.1227E 01
0.0067	0.3916E-00	0.2110E 01	0.5689E 00	0.9106E 00	0.5904E 00	0.3301E-00	0.6466E-01	0.1225E 01
0.0133	0.4793E-00	0.1889E 01	0.6589E 00	0.9122E 00	0.6475E 00	0.4265E-00	0.9569E-01	0.1223E 01
0.0200	0.5103E 00	0.1816E 01	0.6877E 00	0.9142E 00	0.6729E 00	0.4627E-00	0.1106E-00	0.1222E 01
0.0267	0.5286E 00	0.1774E 01	0.7042E 00	0.9157E 00	0.6880E 00	0.4843E-00	0.1206E-00	0.1220E 01
0.0333	0.5401E 00	0.1749E 01	0.7145E 00	0.9175E 00	0.6967E 00	0.4977E-00	0.1274E-00	0.1219E 01
0.0400	0.5498E 00	0.1729E 01	0.7232E 00	0.9193E 00	0.7040E 00	0.5090E 00	0.1334E-00	0.1217E 01
0.0467	0.5589E 00	0.1711E 01	0.7312E 00	0.9210E 00	0.7107E 00	0.5195E 00	0.1392E-00	0.1216E 01
0.0533	0.5671E 00	0.1695E 01	0.7384E 00	0.9230E 00	0.7164E 00	0.5289E 00	0.1447E-00	0.1214E 01
0.0600	0.5749E 00	0.1679E 01	0.7452E 00	0.9247E 00	0.7221E 00	0.5380E 00	0.1502E-00	0.1213E 01
0.0667	0.5822E 00	0.1666E 01	0.7515E 00	0.9265E 00	0.7272E 00	0.5464E 00	0.1555E-00	0.1211E 01
0.1000	0.6142E 00	0.1609E 01	0.7794E 00	0.9366E 00	0.7479E 00	0.5827E 00	0.1810E-00	0.1204E 01
0.1333	0.6416E 00	0.1566E 01	0.8032E 00	0.9477E 00	0.7637E 00	0.6132E 00	0.2061E-00	0.1196E 01
0.1667	0.6663E 00	0.1526E 01	0.8232E 00	0.9562E 00	0.7790E 00	0.6411E 00	0.2317E-00	0.1189E 01
0.2000	0.6895E 00	0.1484E 01	0.8401E 00	0.9614E 00	0.7959E 00	0.6684E 00	0.2585E-00	0.1181E 01
0.2333	0.7110E 00	0.1445E 01	0.8549E 00	0.9656E 00	0.8119E 00	0.6940E 00	0.2861E-00	0.1174E 01
0.2667	0.7305E 00	0.1411E 01	0.8678E 00	0.9691E 00	0.8266E 00	0.7171E 00	0.3134E-00	0.1166E 01
0.3000	0.7490E 00	0.1377E 01	0.8793E 00	0.9717E 00	0.8409E 00	0.7392E 00	0.3415E-00	0.1159E 01
0.3333	0.7684E 00	0.1344E 01	0.8909E 00	0.9743E 00	0.8565E 00	0.7629E 00	0.3737E-00	0.1151E 01
0.3667	0.7866E 00	0.1312E 01	0.9014E 00	0.9767E 00	0.8711E 00	0.7850E 00	0.4065E-00	0.1143E 01
0.4000	0.8049E 00	0.1282E 01	0.9115E 00	0.9791E 00	0.8858E 00	0.8073E 00	0.4421E-00	0.1136E 01
0.4333	0.8242E 00	0.1251E 01	0.9219E 00	0.9816E 00	0.9021E 00	0.8314E 00	0.4832E-00	0.1128E 01
0.4667	0.8435E 00	0.1220E 01	0.9319E 00	0.9839E 00	0.9185E 00	0.8558E 00	0.5280E 00	0.1121E 01
0.5000	0.8644E 00	0.1188E 01	0.9423E 00	0.9865E 00	0.9371E 00	0.8828E 00	0.5811E 00	0.1113E 01
0.5333	0.8851E 00	0.1157E 01	0.9522E 00	0.9889E 00	0.9557E 00	0.9098E 00	0.6385E 00	0.1106E 01
0.5667	0.9056E 00	0.1127E 01	0.9616E 00	0.9912E 00	0.9742E 00	0.9366E 00	0.7005E 00	0.1098E 01
0.6000	0.9226E 00	0.1103E 01	0.9691E 00	0.9930E 00	0.9886E 00	0.9578E 00	0.7550E 00	0.1091E 01
0.6333	0.9377E 00	0.1082E 01	0.9757E 00	0.9946E 00	0.1001E 01	0.9762E 00	0.8065E 00	0.1083E 01
0.6667	0.9512E 00	0.1064E 01	0.9813E 00	0.9960E 00	0.1011E 01	0.9917E 00	0.8542E 00	0.1075E 01
0.7000	0.9622E 00	0.1049E 01	0.9857E 00	0.9971E 00	0.1018E 01	0.1003E 01	0.8939E 00	0.1068E 01
0.7333	0.9699E 00	0.1039E 01	0.9888E 00	0.9978E 00	0.1021E 01	0.1009E 01	0.9207E 00	0.1060E 01
0.7667	0.9768E 00	0.1030E 01	0.9915E 00	0.9984E 00	0.1022E 01	0.1013E 01	0.9446E 00	0.1053E 01
0.8000	0.9813E 00	0.1024E 01	0.9932E 00	0.9989E 00	0.1021E 01	0.1013E 01	0.9580E 00	0.1045E 01
0.8333	0.9850E 00	0.1019E 01	0.9946E 00	0.9990E 00	0.1018E 01	0.1012E 01	0.9679E 00	0.1038E 01
0.8667	0.9879E 00	0.1015E 01	0.9957E 00	0.9992E 00	0.1014E 01	0.1010E 01	0.9741E 00	0.1030E 01
0.9000	0.9909E 00	0.1011E 01	0.9968E 00	0.9994E 00	0.1011E 01	0.1007E 01	0.9804E 00	0.1023E 01
0.9333	0.9939E 00	0.1008E 01	0.9979E 00	0.9996E 00	0.1007E 01	0.1005E 01	0.9869E 00	0.1015E 01
0.9667	0.9968E 00	0.1004E 01	0.9989E 00	0.9998E 00	0.1004E 01	0.1002E 01	0.9935E 00	0.1008E 01
1.0000	0.9999E 00	0.9999E 00	0.1000E 01	1.0000E 00	0.9999E 00	0.9997E 00	0.1000E 01	1.0000E 00

TABLE V - CONTINUED.

(i) $M_\infty = 3.30$ STATION 8 $T_w/T_\delta = 2.612$

$\delta = 0.575$ IN $M_\delta = 3.067$ $T_\delta = 196.7$ °R $U_\delta = 2109$ FT/SEC $T_{T_\delta} = 566.9$ °R

$\rho_\delta = 0.6207 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.309$ SLUGS/FT²-SEC $P_\delta = 209.55$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2612E 01	0.	0.9063E 00	0.4409E-00	0.	0.2836E-01	0.1151E 01
0.0087	0.3702E-00	0.2088E 01	0.5347E 00	0.9113E 00	0.5509E 00	0.2946E-00	0.6320E-01	0.1150E 01
0.0174	0.4587E-00	0.1891E 01	0.6304E 00	0.9157E 00	0.6077E 00	0.3832E-00	0.9087E-01	0.1149E 01
0.0261	0.5158E 00	0.1766E 01	0.6852E 00	0.9196E 00	0.6498E 00	0.4453E-00	0.1169E-00	0.1147E 01
0.0348	0.5548E 00	0.1685E 01	0.7198E 00	0.9230E 00	0.6805E 00	0.4898E-00	0.1396E-00	0.1146E 01
0.0435	0.5762E 00	0.1643E 01	0.7382E 00	0.9261E 00	0.6970E 00	0.5145E 00	0.1540E-00	0.1145E 01
0.0522	0.5896E 00	0.1619E 01	0.7500E 00	0.9292E 00	0.7065E 00	0.5298E 00	0.1639E-00	0.1143E 01
0.0609	0.6007E 00	0.1600E 01	0.7595E 00	0.9319E 00	0.7141E 00	0.5424E 00	0.1724E-00	0.1142E 01
0.0696	0.6102E 00	0.1585E 01	0.7678E 00	0.9349E 00	0.7202E 00	0.5530E 00	0.1802E-00	0.1141E 01
0.0783	0.6185E 00	0.1571E 01	0.7749E 00	0.9374E 00	0.7255E 00	0.5622E 00	0.1871E-00	0.1140E 01
0.0870	0.6262E 00	0.1559E 01	0.7814E 00	0.9397E 00	0.7304E 00	0.5708E 00	0.1938E-00	0.1138E 01
0.1304	0.6596E 00	0.1504E 01	0.8087E 00	0.9492E 00	0.7524E 00	0.6085E 00	0.2259E-00	0.1132E 01
0.1739	0.6886E 00	0.1457E 01	0.8308E 00	0.9565E 00	0.7724E 00	0.6417E 00	0.2581E-00	0.1125E 01
0.2174	0.7156E 00	0.1415E 01	0.8507E 00	0.9636E 00	0.7909E 00	0.6729E 00	0.2920E-00	0.1118E 01
0.2609	0.7401E 00	0.1375E 01	0.8675E 00	0.9688E 00	0.8087E 00	0.7016E 00	0.3265E-00	0.1112E 01
0.3043	0.7621E 00	0.1339E 01	0.8817E 00	0.9726E 00	0.8254E 00	0.7278E 00	0.3609E-00	0.1105E 01
0.3478	0.7825E 00	0.1306E 01	0.8940E 00	0.9753E 00	0.8414E 00	0.7522E 00	0.3956E-00	0.1099E 01
0.3913	0.8041E 00	0.1272E 01	0.9065E 00	0.9782E 00	0.8568E 00	0.7786E 00	0.4359E-00	0.1092E 01
0.4348	0.8284E 00	0.1234E 01	0.9200E 00	0.9813E 00	0.8796E 00	0.8093E 00	0.4865E-00	0.1086E 01
0.4783	0.8497E 00	0.1203E 01	0.9314E 00	0.9839E 00	0.8974E 00	0.8359E 00	0.5350E 00	0.1079E 01
0.5217	0.8749E 00	0.1166E 01	0.9443E 00	0.9870E 00	0.9201E 00	0.8689E 00	0.5993E 00	0.1072E 01
0.5652	0.8976E 00	0.1134E 01	0.9553E 00	0.9896E 00	0.9403E 00	0.8983E 00	0.6628E 00	0.1066E 01
0.6087	0.9177E 00	0.1106E 01	0.9648E 00	0.9919E 00	0.9578E 00	0.9241E 00	0.7237E 00	0.1059E 01
0.6522	0.9363E 00	0.1081E 01	0.9732E 00	0.9939E 00	0.9737E 00	0.9476E 00	0.7843E 00	0.1053E 01
0.6957	0.9515E 00	0.1061E 01	0.9799E 00	0.9955E 00	0.9858E 00	0.9660E 00	0.8366E 00	0.1046E 01
0.7391	0.9651E 00	0.1044E 01	0.9857E 00	0.9969E 00	0.9959E 00	0.9817E 00	0.8852E 00	0.1039E 01
0.7826	0.9747E 00	0.1032E 01	0.9897E 00	0.9979E 00	0.1001E 01	0.9909E 00	0.9194E 00	0.1033E 01
0.8261	0.9819E 00	0.1023E 01	0.9926E 00	0.9985E 00	0.1004E 01	0.9963E 00	0.9445E 00	0.1026E 01
0.8696	0.9876E 00	0.1016E 01	0.9949E 00	0.9990E 00	0.1004E 01	0.9991E 00	0.9633E 00	0.1020E 01
0.9130	0.9933E 00	0.1009E 01	0.9972E 00	0.9995E 00	0.1005E 01	0.1002E 01	0.9825E 00	0.1013E 01
0.9565	0.9975E 00	0.1003E 01	0.9988E 00	0.9999E 00	0.1003E 01	0.1002E 01	0.9949E 00	0.1007E 01
1.0000	0.1000E 01	0.1000E 01	0.9998E 00	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	1.0000E 00

TABLE V - CONTINUED.

(j) $M_\infty = 3.30$ STATION 10 $T_w/T_\delta = 2.538$

$\delta = 0.525$ IN $M_\delta = 3.010$ $T_\delta = 203.6$ °R $U_\delta = 2105$ FT/SEC $T_{T_\delta} = 572.6$ °R

$\rho_\delta = 0.6603 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.390$ SLUGS/FT²-SEC $P_\delta = 230.68$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2539E 01	0.	0.9028E 00	0.4425E-00	0.	0.3014E-01	0.1124E 01
0.0095	0.4204E-00	0.1927E 01	0.5836E 00	0.9046E 00	0.5824E 00	0.3399E-00	0.7956E-01	0.1122E 01
0.0190	0.4983E-00	0.1758E 01	0.6608E 00	0.9066E 00	0.6377E 00	0.4213E-00	0.1104E-00	0.1121E 01
0.0286	0.5790E 00	0.1590E 01	0.7301E 00	0.9088E 00	0.7043E 00	0.5142E 00	0.1581E-00	0.1120E 01
0.0381	0.6171E 00	0.1517E 01	0.7600E 00	0.9116E 00	0.7375E 00	0.5605E 00	0.1883E-00	0.1119E 01
0.0476	0.6325E 00	0.1491E 01	0.7723E 00	0.9144E 00	0.7497E 00	0.5790E 00	0.2020E-00	0.1118E 01
0.0571	0.6420E 00	0.1478E 01	0.7803E 00	0.9177E 00	0.7556E 00	0.5896E 00	0.2109E-00	0.1117E 01
0.0667	0.6505E 00	0.1467E 01	0.7879E 00	0.9218E 00	0.7601E 00	0.5989E 00	0.2192E-00	0.1115E 01
0.0762	0.6585E 00	0.1458E 01	0.7951E 00	0.9258E 00	0.7641E 00	0.6075E 00	0.2273E-00	0.1114E 01
0.0857	0.6656E 00	0.1456E 01	0.8031E 00	0.9334E 00	0.7643E 00	0.6138E 00	0.2347E-00	0.1113E 01
0.0952	0.6724E 00	0.1451E 01	0.8100E 00	0.9388E 00	0.7661E 00	0.6205E 00	0.2421E-00	0.1112E 01
0.1429	0.7054E 00	0.1414E 01	0.8388E 00	0.9561E 00	0.7821E 00	0.6560E 00	0.2812E-00	0.1106E 01
0.1905	0.7324E 00	0.1377E 01	0.8594E 00	0.9655E 00	0.7989E 00	0.6865E 00	0.3177E-00	0.1100E 01
0.2381	0.7576E 00	0.1338E 01	0.8764E 00	0.9707E 00	0.8176E 00	0.7165E 00	0.3558E-00	0.1094E 01
0.2857	0.7798E 00	0.1303E 01	0.8901E 00	0.9739E 00	0.8352E 00	0.7434E 00	0.3929E-00	0.1088E 01
0.3333	0.8039E 00	0.1266E 01	0.9044E 00	0.9772E 00	0.8550E 00	0.7733E 00	0.4376E-00	0.1082E 01
0.3810	0.8250E 00	0.1234E 01	0.9164E 00	0.9800E 00	0.8722E 00	0.7993E 00	0.4804E-00	0.1077E 01
0.4286	0.8465E 00	0.1202E 01	0.9283E 00	0.9828E 00	0.8903E 00	0.8264E 00	0.5286E 00	0.1071E 01
0.4762	0.8686E 00	0.1171E 01	0.9399E 00	0.9856E 00	0.9093E 00	0.8546E 00	0.5827E 00	0.1065E 01
0.5238	0.8888E 00	0.1143E 01	0.9501E 00	0.9880E 00	0.9265E 00	0.8802E 00	0.6364E 00	0.1059E 01
0.5714	0.9080E 00	0.1117E 01	0.9595E 00	0.9903E 00	0.9428E 00	0.9046E 00	0.6916E 00	0.1053E 01
0.6190	0.9262E 00	0.1093E 01	0.9681E 00	0.9924E 00	0.9583E 00	0.9277E 00	0.7479E 00	0.1047E 01
0.6667	0.9435E 00	0.1070E 01	0.9760E 00	0.9943E 00	0.9728E 00	0.9495E 00	0.8052E 00	0.1041E 01
0.7143	0.9584E 00	0.1051E 01	0.9826E 00	0.9960E 00	0.9848E 00	0.9676E 00	0.8571E 00	0.1035E 01
0.7619	0.9710E 00	0.1036E 01	0.9881E 00	0.9973E 00	0.9941E 00	0.9822E 00	0.9027E 00	0.1029E 01
0.8095	0.9806E 00	0.1024E 01	0.9921E 00	0.9982E 00	0.9998E 00	0.9919E 00	0.9376E 00	0.1024E 01
0.8571	0.9866E 00	0.1016E 01	0.9946E 00	0.9988E 00	0.1001E 01	0.9957E 00	0.9576E 00	0.1018E 01
0.9048	0.9918E 00	0.1010E 01	0.9967E 00	0.9993E 00	0.1002E 01	0.9983E 00	0.9748E 00	0.1012E 01
0.9524	0.9970E 00	0.1004E 01	0.9988E 00	0.9997E 00	0.1002E 01	0.1001E 01	0.9925E 00	0.1006E 01
1.0000	0.1000E 01	0.9999E 00	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01	1.0000E 00

TABLE V - CONTINUED.

(k) M_∞ = 4.50 STATION 0 T_w/T_δ = 3.879

δ = 0.700 IN M_δ = 4.059 T_δ = 132.4 °R U_δ = 2289 FT/SEC T_{T_δ} = 568.7 °R

ρ_δ = 0.1658 × 10^{-3} SLUGS/FT³ $\rho_\delta U_\delta$ = 0.3796 SLUGS/FT²-SEC P_δ = 37.68 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3880E 01	0.	0.9033E CC	0.2578E-C0	0.	0.6091E-02	0.1000E 01
0.0071	0.1369E-00	0.3579E 01	0.2589E-00	0.8846E 00	0.2795E-00	0.7236E-01	0.7512E-02	0.1000E 01
0.0143	0.3103E-00	0.2877E 01	0.5263E 00	0.8822E 00	0.3477E-C0	0.1830E-00	0.1597E-01	0.1000E 01
0.0214	0.3603E-00	0.2647E 01	0.5863E CC	C.8801E 0C	0.3779E-C0	C.2215E-00	0.2118E-01	0.1000E 01
0.0286	0.3863E-00	0.2528E 01	0.6142E 00	0.8780E 00	0.3957E-C0	0.2430E-00	0.2469E-01	0.1000E 01
0.0357	0.4008E-00	0.2461E 01	C.6287E 00	0.8762E 00	0.4065E-C0	0.2555E-00	0.2693E-01	0.1000E 01
0.0429	0.4133E-00	0.2403E 01	0.6407E 00	0.8745E 00	0.4162E-C0	0.2666E-00	0.2906E-01	0.1000E C1
0.0500	0.4228E-00	0.2360E 01	0.6495E CC	0.8730E CC	0.4239E-C0	C.2753E-00	0.3080E-01	0.1000E 01
0.0571	0.4334E-00	0.2312E 01	0.659CE 00	0.8715E 00	0.4326E-C0	0.2850E-00	0.3287E-01	0.1000E 01
0.0643	0.4424E-00	0.2273E 01	0.6669E 00	0.87C2E 00	0.4402E-00	0.2935E-00	0.3476E-01	0.1000E 01
0.0714	0.4500E-00	0.2241E 01	0.6736E 00	0.8699E 00	0.4464E-00	C.3006E-00	0.3644E-01	0.1000E C1
0.1071	0.4873E-00	0.2104E 01	0.706EE C0	0.8731E 00	0.4754E-C0	0.3360E-00	0.4603E-01	0.1000E 01
0.1429	0.5207E 00	0.1999E 01	0.7363E 00	0.8813E 0C	0.5003E C0	0.3683E-00	0.5689E-01	0.1000E 01
0.1786	0.5521E 00	0.1909E 01	0.7629E 00	0.891CE 00	0.5240E C0	0.3996E-00	0.6944E-01	0.1000E 01
0.2143	0.5818E 00	0.1832E 01	0.7874E 00	0.9020E 00	0.5462E C0	C.4300E-00	0.8385E-01	0.1000E C1
0.2500	0.6100E 00	0.1767E 01	0.8109E 00	U.9158E C0	0.5662E C0	0.4590E-00	0.1C03E-00	0.1000E 01
0.2857	0.6343E 00	0.1715E 01	0.8308E 00	0.9289E 00	0.5832E C0	0.4844E-00	0.1169E-00	0.1000E 01
0.3214	0.6620E 00	0.1652E 01	C.8509E 00	0.9400E 00	0.6055E 00	0.5151E 00	0.1390E-00	0.1000E 01
0.3571	0.6926E 00	0.1582E 01	0.8710E 00	C.9502E CC	0.6325E C0	C.5508E 00	0.1681E-00	0.1000E C1
0.3929	0.7203E 00	0.1519E 01	0.8876E 00	0.9580E CC	0.6588E C0	0.5846E 00	0.1995E-00	0.1000E 01
0.4286	0.7493E 00	0.1455E 01	0.9037E 00	0.9651E 00	0.6877E C0	0.6213E 00	0.2380E-00	0.1000E 01
0.4643	0.7771E 00	0.1395E 01	C.9179E 00	0.9712E 00	0.7170E 00	0.6580E 00	0.2815E-00	0.1000E 01
0.5000	0.8054E 00	0.1336E 01	0.9311E CC	C.9762E 0C	0.7486E C0	0.6968E 00	0.3332E-00	0.1000E C1
0.5357	0.8307E 00	0.1286E 01	0.9422E 00	0.9805E C0	0.7776E C0	0.7325E 00	0.3867E-00	0.1000E 01
0.5714	0.8572E 00	0.1236E 01	0.9529E 00	0.9843E 00	0.8095E C0	0.7713E 00	0.4512E-00	0.1000E 01
0.6071	0.8817E 00	0.1191E 01	C.9623E 00	0.9877E 00	0.8398E 00	0.8079E 00	0.5193E 00	0.1000E 01
0.6429	0.9049E 00	0.1150E 01	0.97C5E C0	0.9903E 0C	0.8696E C0	C.8438E 00	0.5922E 00	0.1000E 01
0.6786	0.9256E 00	0.1115E 01	0.9775E 00	0.9926E 0C	0.8971E 00	C.8766E 00	0.6655E 00	0.1000E 01
0.7143	0.9448E 00	0.1084E 01	0.9836E 00	0.9946E 00	0.9229E C0	0.9076E 00	0.7402E 00	0.1000E 01
0.7500	0.9624E 00	0.1056E 01	0.9891E 00	0.9963E 00	0.9471E 00	0.9365E 00	0.8155E 00	0.1000E C1
0.7857	0.9768E 00	0.1034E 01	0.9934E CC	0.9978E CC	0.9672E C0	C.9606E C0	0.8822E 00	0.1000E C1
0.8214	0.9853E 00	0.1021E 01	0.9958E 00	0.9986E 0C	0.9793E C0	0.9750E 00	0.9241E 00	0.1000E 01
0.8571	0.9910E 00	0.1013E 01	0.9975E 00	0.9991E 00	0.9874E 00	0.9847E 00	0.9528E 00	C.1000E 01
0.8929	0.9944E 00	0.1008E 01	0.9984E 00	0.9994E 00	0.9922E 00	0.9904E 00	0.9703E 00	0.1000E C1
0.9286	0.9977E 00	0.1003E 01	0.9994E CC	0.9998E 0C	0.9971E C0	C.9962E 00	0.9881E 00	0.1000E 01
0.9643	0.9994E 00	0.1C01E 01	0.9998E 00	0.9999E 00	0.9995E C0	0.9991E 00	0.9970E 00	0.1000E 01
1.0000	1.0000E 00	0.1000E 01	C.1000E 01	1.000CE 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01

TABLE V - CONTINUED.

(1) $M_\infty = 4.50$ STATION 2 $T_w/T_\delta = 4.524$

$\delta = 0.650$ IN $M_\delta = 4.485$ $T_\delta = 112.8$ °R $U_\delta = 2335$ FT/SEC $T_{T_\delta} = 566.8$ °R

$\rho_\delta = 0.1587 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.3706$ SLUGS/FT²-SEC $P_\delta = 30.73$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.4525E 01	0.	0.9005E 00	0.3040E-00	0.	0.4839E-02	0.1375E 01
0.0077	0.2028E-00	0.3899E 01	0.4003E-00	0.9042E 00	0.3520E-00	0.1409E-00	0.8250E-02	0.1372E 01
0.0154	0.3340E-00	0.3148E 01	0.5925E 00	0.9077E 00	0.4350E-00	0.2577E-00	0.1762E-01	0.1369E 01
0.0231	0.3619E-00	0.2996E 01	0.6264E 00	0.9106E 00	0.4560E-00	0.2856E-00	0.2114E-01	0.1366E 01
0.0308	0.3748E-00	0.2932E 01	0.6416E 00	0.9132E 00	0.4651E-00	0.2984E-00	0.2300E-01	0.1363E 01
0.0385	0.3851E-00	0.2881E 01	0.6536E 00	0.9155E 00	0.4722E-00	0.3086E-00	0.2461E-01	0.1360E 01
0.0462	0.3941E-00	0.2838E 01	0.6639E 00	0.9178E 00	0.4783E-00	0.3175E-00	0.2611E-01	0.1357E 01
0.0538	0.4025E-00	0.2798E 01	0.6731E 00	0.9197E 00	0.4841E-00	0.3258E-00	0.2759E-01	0.1354E 01
0.0615	0.4097E-00	0.2764E 01	0.6810E 00	0.9215E 00	0.4889E-00	0.3329E-00	0.2892E-01	0.1351E 01
0.0692	0.4173E-00	0.2729E 01	0.6891E 00	0.9234E 00	0.4942E-00	0.3405E-00	0.3041E-01	0.1348E 01
0.0769	0.4238E-00	0.2698E 01	0.6959E 00	0.9248E 00	0.4987E-00	0.3470E-00	0.3173E-01	0.1345E 01
0.1154	0.4578E-00	0.2540E 01	0.7296E 00	0.9319E 00	0.5240E 00	0.3823E-00	0.3981E-01	0.1331E 01
0.1538	0.4904E-00	0.2397E 01	0.7590E 00	0.9384E 00	0.5490E 00	0.4167E-00	0.4943E-01	0.1315E 01
0.1923	0.5213E 00	0.2266E 01	0.7847E 00	0.9442E 00	0.5742E 00	0.4505E-00	0.6076E-01	0.1301E 01
0.2308	0.5538E 00	0.2137E 01	0.8094E 00	0.9500E 00	0.6018E 00	0.4870E-00	0.7535E-01	0.1285E 01
0.2692	0.5834E 00	0.2025E 01	0.8301E 00	0.9550E 00	0.6278E 00	0.5211E 00	0.9155E-01	0.1271E 01
0.3077	0.6122E 00	0.1923E 01	0.8487E 00	0.9595E 00	0.6538E 00	0.5548E 00	0.1104E-00	0.1257E 01
0.3462	0.6424E 00	0.1821E 01	0.8667E 00	0.9641E 00	0.6824E 00	0.5914E 00	0.1342E-00	0.1242E 01
0.3846	0.6712E 00	0.1730E 01	0.8826E 00	0.9681E 00	0.7101E 00	0.6267E 00	0.1612E-00	0.1228E 01
0.4231	0.7001E 00	0.1643E 01	0.8973E 00	0.9719E 00	0.7387E 00	0.6628E 00	0.1932E-00	0.1213E 01
0.4615	0.7305E 00	0.1558E 01	0.9116E 00	0.9757E 00	0.7699E 00	0.7018E 00	0.2332E-00	0.1199E 01
0.5000	0.7597E 00	0.1481E 01	0.9244E 00	0.9791E 00	0.8002E 00	0.7396E 00	0.2785E-00	0.1185E 01
0.5385	0.7885E 00	0.1410E 01	0.9360E 00	0.9823E 00	0.8304E 00	0.7772E 00	0.3307E-00	0.1170E 01
0.5769	0.8164E 00	0.1345E 01	0.9465E 00	0.9852E 00	0.8599E 00	0.8138E 00	0.3893E-00	0.1156E 01
0.6154	0.8434E 00	0.1285E 01	0.9560E 00	0.9878E 00	0.8884E 00	0.8493E 00	0.4546E-00	0.1141E 01
0.6538	0.8697E 00	0.1231E 01	0.9647E 00	0.9903E 00	0.9161E 00	0.8836E 00	0.5270E 00	0.1127E 01
0.6923	0.8970E 00	0.1177E 01	0.9730E 00	0.9926E 00	0.9455E 00	0.9199E 00	0.6130E 00	0.1113E 01
0.7308	0.9213E 00	0.1132E 01	0.9801E 00	0.9946E 00	0.9696E 00	0.9501E 00	0.6979E 00	0.1097E 01
0.7692	0.9419E 00	0.1096E 01	0.9857E 00	0.9962E 00	0.9887E 00	0.9745E 00	0.7769E 00	0.1083E 01
0.8077	0.9593E 00	0.1066E 01	0.9902E 00	0.9975E 00	0.1003E 01	0.9929E 00	0.8477E 00	0.1068E 01
0.8462	0.9725E 00	0.1044E 01	0.9935E 00	0.9984E 00	0.1010E 01	0.1003E 01	0.9020E 00	0.1054E 01
0.8846	0.9818E 00	0.1029E 01	0.9958E 00	0.9990E 00	0.1011E 01	0.1006E 01	0.9380E 00	0.1040E 01
0.9231	0.9886E 00	0.1018E 01	0.9974E 00	0.9994E 00	0.1007E 01	0.1004E 01	0.9609E 00	0.1025E 01
0.9615	0.9951E 00	0.1008E 01	0.9989E 00	0.9998E 00	0.1003E 01	0.1002E 01	0.9832E 00	0.1011E 01
1.0000	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01

TABLE V - CONTINUED.

(m) M_∞ = 4.50 STATION 6 T_w/T_δ = 4.003

δ = 0.525 IN M_δ = 4.166 T_δ = 126.6 °R U_δ = 2297 FT/SEC T_{T_δ} = 565.9 °R

ρ_δ = 0.2074 × 10^{-3} SLUGS/FT³ $\rho_\delta U_\delta$ = 0.4763 SLUGS/FT²-SEC P_δ = 45.03 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.4004E 01	0.	0.8958E 00	0.3122E-00	0.	0.6620E-02	0.1251E 01
0.0095	0.1430E-00	0.3806E 01	0.2790E-00	0.9118E 00	0.3279E-00	0.9149E-01	0.8399E-02	0.1248E 01
0.0190	0.2879E-00	0.3176E 01	0.5130E 00	0.9148E 00	0.3921E-00	0.2012E-00	0.1597E-01	0.1246E 01
0.0236	0.3488E-00	0.2883E 01	0.5923E 00	0.9173E 00	0.4312E-00	0.2554E-00	0.2258E-01	0.1243E 01
0.0381	0.4007E-00	0.2640E 01	0.6512E 00	0.9198E 00	0.4699E-00	0.3061E-00	0.3095E-01	0.1241E 01
0.0476	0.4299E-00	0.2510E 01	0.6813E 00	0.9219E 00	0.4933E-00	0.3361E-00	0.3715E-01	0.1239E 01
0.0571	0.4445E-00	0.2450E 01	0.6958E 00	0.9240E 00	0.5044E 00	0.3510E-00	0.4069E-01	0.1236E 01
0.0667	0.4563E-00	0.2402E 01	0.7073E 00	0.9258E 00	0.5134E 00	0.3632E-00	0.4380E-01	0.1234E 01
0.0762	0.4670E-00	0.2360E 01	0.7175E 00	0.9275E 00	0.5216E 00	0.3743E-00	0.4684E-01	0.1231E 01
0.0857	0.4759E-00	0.2325E 01	0.7259E 00	0.9293E 00	0.5283E 00	0.3836E-00	0.4955E-01	0.1229E 01
0.0952	0.4840E-00	0.2295E 01	0.7334E 00	0.9309E 00	0.5343E 00	0.3919E-00	0.5211E-01	0.1227E 01
0.1429	0.5202E 00	0.2164E 01	0.7653E 00	0.9387E 00	0.5612E 00	0.4296E-00	0.6529E-01	0.1215E 01
0.1905	0.5559E 00	0.2039E 01	0.7939E 00	0.9455E 00	0.5897E 00	0.4683E-00	0.8162E-01	0.1203E 01
0.2381	0.5902E 00	0.1926E 01	0.8190E 00	0.9515E 00	0.6182E 00	0.5065E 00	0.1010E-00	0.1191E 01
0.2857	0.6237E 00	0.1820E 01	0.8416E 00	0.9572E 00	0.6474E 00	0.5450E 00	0.1242E-00	0.1179E 01
0.3333	0.6585E 00	0.1718E 01	0.8631E 00	0.9626E 00	0.6792E 00	0.5863E 00	0.1537E-00	0.1167E 01
0.3810	0.6899E 00	0.1630E 01	0.8810E 00	0.9672E 00	0.7083E 00	0.6242E 00	0.1858E-00	0.1155E 01
0.4286	0.7206E 00	0.1550E 01	0.8972E 00	0.9715E 00	0.7375E 00	0.6618E 00	0.2229E-00	0.1143E 01
0.4762	0.7507E 00	0.1475E 01	0.9118E 00	0.9754E 00	0.7666E 00	0.6992E 00	0.2659E-00	0.1131E 01
0.5238	0.7817E 00	0.1403E 01	0.9259E 00	0.9792E 00	0.7978E 00	0.7388E 00	0.3181E-00	0.1119E 01
0.5714	0.8126E 00	0.1334E 01	0.9389E 00	0.9828E 00	0.8295E 00	0.7790E 00	0.3794E-00	0.1107E 01
0.6190	0.8464E 00	0.1265E 01	0.9520E 00	0.9865E 00	0.8659E 00	0.8245E 00	0.4589E-00	0.1095E 01
0.6667	0.8824E 00	0.1195E 01	0.9649E 00	0.9902E 00	0.9061E 00	0.8745E 00	0.5602E 00	0.1083E 01
0.7143	0.9177E 00	0.1132E 01	0.9765E 00	0.9936E 00	0.9463E 00	0.9243E 00	0.6785E 00	0.1072E 01
0.7619	0.9507E 00	0.1077E 01	0.9866E 00	0.9965E 00	0.9840E 00	0.9710E 00	0.8080E 00	0.1060E 01
0.8095	0.9729E 00	0.1041E 01	0.9929E 00	0.9983E 00	0.1006E 01	0.9990E 00	0.9037E 00	0.1048E 01
0.8571	0.9861E 00	0.1021E 01	0.9965E 00	0.9993E 00	0.1014E 01	0.1011E 01	0.9603E 00	0.1036E 01
0.9048	0.9923E 00	0.1011E 01	0.9981E 00	0.9997E 00	0.1012E 01	0.1010E 01	0.9824E 00	0.1024E 01
0.9524	0.9965E 00	0.1005E 01	0.9992E 00	0.9999E 00	0.1007E 01	0.1006E 01	0.9934E 00	0.1012E 01
1.0000	0.9999E 00	0.9999E 00	1.0000E 00	0.1000E 01	0.9999E 00	0.1000E 01	1.0000E 00	0.1000E 01

TABLE V - CONCLUDED.

(n) M_∞ = 4.50 STATION 8 T_w/T_δ = 3.711

δ = 0.500 IN M_δ = 3.960 T_δ = 137.6 °R U_δ = 2277 FT/SEC T_{T_δ} = 569.2 °R

ρ_δ = 0.2360 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 0.5373 SLUGS/FT²-SEC P_δ = 55.73 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3712E 01	0.	0.8973E 00	0.3260E-00	0.	0.8409E-02	0.1210E 01
0.0100	0.2466E-00	0.3235E 01	0.4435E-00	0.9311E 00	0.3734E-00	0.1656E-00	0.1546E-01	0.1208E 01
0.0200	0.3884E-00	0.2623E 01	0.6289E 00	0.9339E 00	0.4597E-00	0.2891E-00	0.3249E-01	0.1206E 01
0.0300	0.4572E-00	0.2340E 01	0.6993E 00	0.9366E 00	0.5142E 00	0.3596E-00	0.4882E-01	0.1203E 01
0.0400	0.4902E-00	0.2215E 01	0.7294E 00	0.9389E 00	0.5424E 00	0.3957E-00	0.5960E-01	0.1201E 01
0.0500	0.5069E 00	0.2156E 01	0.7440E 00	0.9410E 00	0.5562E 00	0.4139E-00	0.6590E-01	0.1199E 01
0.0600	0.5191E 00	0.2114E 01	0.7546E 00	0.9429E 00	0.5662E 00	0.4273E-00	0.7096E-01	0.1197E 01
0.0700	0.5293E 00	0.2080E 01	0.7632E 00	0.9447E 00	0.5742E 00	0.4383E-00	0.7541E-01	0.1194E 01
0.0800	0.5393E 00	0.2047E 01	0.7714E 00	0.9461E 00	0.5825E 00	0.4494E-00	0.80C7E-01	0.1192E 01
0.0900	0.5485E 00	0.2018E 01	0.7791E 00	0.9483E 00	0.5896E 00	0.4594E-00	0.8462E-01	0.1190E 01
0.1000	0.5576E 00	0.1989E 01	0.7863E 00	0.9497E 00	0.5972E 00	0.4696E-00	0.8936E-01	0.1188E 01
0.1500	0.5974E 00	0.1866E 01	0.8159E 00	0.9560E 00	0.6309E 00	0.5148E 00	0.1133E-00	0.1177E 01
0.2000	0.6356E 00	0.1755E 01	0.8418E 00	0.9616E 00	0.6652E 00	0.5601E 00	0.1423E-00	0.1167E 01
0.2500	0.6732E 00	0.1652E 01	0.8650E 00	0.9668E 00	0.7009E 00	0.6064E 00	0.1777E-00	0.1158E 01
0.3000	0.7064E 00	0.1566E 01	0.8839E 00	0.9712E 00	0.7320E 00	0.6471E 00	0.2153E-00	0.1147E 01
0.3500	0.7397E 00	0.1485E 01	0.9014E 00	0.9753E 00	0.7652E 00	0.6898E 00	0.2608E-00	0.1136E 01
0.4000	0.7719E 00	0.1412E 01	0.9170E 00	0.9790E 00	0.7976E 00	0.7315E 00	0.3129E-00	0.1126E 01
0.4500	0.8034E 00	0.1344E 01	0.9312E 00	0.9825E 00	0.8301E 00	0.7730E 00	0.3729E-00	0.1115E 01
0.5000	0.8350E 00	0.1280E 01	0.9444E 00	0.9857E 00	0.8629E 00	0.8150E 00	0.4431E-00	0.1104E 01
0.5500	0.8695E 00	0.1214E 01	0.9577E 00	0.9891E 00	0.9011E 00	0.8631E 00	0.5345E 00	0.1094E 01
0.6000	0.9037E 00	0.1153E 01	0.9700E 00	0.9922E 00	0.9407E 00	0.9126E 00	0.6421E 00	0.1084E 01
0.6500	0.9357E 00	0.1099E 01	0.9806E 00	0.9950E 00	0.9771E 00	0.9583E 00	0.7589E 00	0.1074E 01
0.7000	0.9602E 00	0.1060E 01	0.9883E 00	0.9970E 00	0.1003E 01	0.9916E 00	0.8590E 00	0.1063E 01
0.7500	0.9739E 00	0.1039E 01	0.9924E 00	0.9980E 00	0.1014E 01	0.1006E 01	0.9161E 00	0.1053E 01
0.8000	0.9825E 00	0.1026E 01	0.9949E 00	0.9987E 00	0.1016E 01	0.1011E 01	0.9496E 00	0.1042E 01
0.8500	0.9884E 00	0.1017E 01	0.9966E 00	0.9991E 00	0.1015E 01	0.1011E 01	0.9702E 00	0.1032E 01
0.9000	0.9929E 00	0.1010E 01	0.9979E 00	0.9994E 00	0.1011E 01	0.1009E 01	0.9833E 00	0.1021E 01
0.9500	0.9970E 00	0.1004E 01	0.9990E 00	0.9997E 00	0.1006E 01	0.1005E 01	0.9947E 00	0.1011E 01
1.0000	1.0000E 00	0.1000E 01	0.9998E 00	1.0000E 00	1.0000E 00	1.0000E 00	0.1000E 01	0.100CE 01

(o) M_∞ = 4.50 STATION 10 T_w/T_δ = 3.368

δ = 0.450 IN M_δ = 3.735 T_δ = 149.7 °R U_δ = 2239 FT/SEC T_{T_δ} = 567.3 °R

ρ_δ = 0.2757 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 0.6174 SLUGS/FT²-SEC P_δ = 70.80 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3369E 01	C.	0.8890E 00	0.3417E-00	0.	0.1086E-01	0.1151E 01
0.0111	0.3389E-00	0.2649E 01	0.5517E 00	0.9230E 00	0.4341E-00	0.2394E-00	0.2869E-01	0.1150E 01
0.0222	0.4561E-00	0.2221E 01	0.6800E 00	0.9263E 00	0.5170E 00	0.3515E-00	0.5377E-01	0.1149E 01
0.0333	0.5274E 00	0.1983E 01	0.7430E 00	0.9295E 00	0.5784E 00	0.4297E-00	0.8082E-01	0.1148E 01
0.0444	0.5626E 00	0.1876E 01	0.7709E 00	0.9323E 00	0.6107E 00	0.4707E-00	0.9907E-01	0.1146E 01
0.0556	0.5820E 00	0.1822E 01	0.7857E 00	0.9350E 00	0.6283E 00	0.4936E-00	0.1108E-00	0.1145E 01
0.0667	0.5956E 00	0.1786E 01	0.7961E 00	0.9376E 00	0.6402E 00	0.5096E 00	0.1198E-00	0.1144E 01
0.0778	0.6063E 00	0.1759E 01	0.8043E 00	0.9401E 00	0.6493E 00	0.5221E 00	0.1275E-00	0.1142E 01
0.0889	0.6159E 00	0.1735E 01	0.8115E 00	0.9423E 00	0.6574E 00	0.5334E 00	0.1346E-00	0.1141E 01
0.1000	0.6243E 00	0.1715E 01	0.8178E 00	0.9445E 00	0.6644E 00	0.5432E 00	0.1413E-00	0.1140E 01
0.1111	0.6322E 00	0.1696E 01	0.8236E 00	0.9466E 00	0.6709E 00	0.5525E 00	0.1477E-00	0.1138E 01
0.1667	0.6669E 00	0.1615E 01	0.8477E 00	0.9548E 00	0.7009E 00	0.5940E 00	0.1799E-00	0.1132E 01
0.2222	0.7011E 00	0.1537E 01	0.8694E 00	0.9616E 00	0.7325E 00	0.6367E 00	0.2181E-00	0.1126E 01
0.2778	0.7335E 00	0.1466E 01	0.8884E 00	0.9676E 00	0.7630E 00	0.6777E 00	0.2611E-00	0.1119E 01
0.3333	0.7681E 00	0.1394E 01	0.9070E 00	0.9731E 00	0.7970E 00	0.7229E 00	0.3159E-00	0.1111E 01
0.3889	0.8004E 00	0.1330E 01	0.9232E 00	0.9780E 00	0.8304E 00	0.7665E 00	0.3767E-00	0.1104E 01
0.4444	0.8320E 00	0.1270E 01	0.9380E 00	0.9826E 00	0.8628E 00	0.8092E 00	0.4459E-00	0.1096E 01
0.5000	0.8630E 00	0.1215E 01	0.9515E 00	0.9867E 00	0.8953E 00	0.8517E 00	0.5249E 00	0.1089E 01
0.5556	0.8917E 00	0.1166E 01	0.9631E 00	0.9902E 00	0.9254E 00	0.8911E 00	0.6088E 00	0.1079E 01
0.6111	0.9196E 00	0.1120E 01	0.9736E 00	0.9930E 00	0.9553E 00	0.9299E 00	0.7016E 00	0.1070E 01
0.6667	0.9452E 00	0.1080E 01	0.9827E 00	0.9955E 00	0.9814E 00	0.9642E 00	0.7965E 00	0.1060E 01
0.7222	0.9685E 00	0.1045E 01	0.9905E 00	0.9977E 00	0.1005E 01	0.9955E 00	0.8924E 00	0.1051E 01
0.7778	0.9821E 00	0.1025E 01	0.9949E 00	0.9989E 00	0.1014E 01	0.1009E 01	0.9481E 00	0.1040E 01
0.8333	0.9877E 00	0.1017E 01	0.9966E 00	0.9993E 00	0.1013E 01	0.1009E 01	0.9672E 00	0.1031E 01
0.8889	0.9925E 00	0.1011E 01	0.9980E 00	0.9996E 00	0.1010E 01	0.1008E 01	0.9822E 00	0.1021E 01
0.9444	0.9965E 00	0.1005E 01	0.9992E 00	0.9998E 00	0.1006E 01	0.1005E 01	0.9929E 00	0.1011E 01
1.0000	0.1000E 01	0.9998E 00	0.100CE 01	0.9999E 00	0.9999E 00	1.0000E 00	1.0000E 00	0.1000E 01

TABLE VI - PROFILES OF VELOCITY, TEMPERATURE, AND PRESSURE FOR THE CONVEX CENTER SECTION WITH A NEARLY ADIABATIC WALL.

(a) M_∞ = 1.61 STATION -2 T_w/T_δ = 1.491

δ = 0.750 IN M_δ = 1.593 T_δ = 362.3 °R U_δ = 1486 FT/SEC T_{T_δ} = 546.1 °R

ρ_δ = 1.379 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 2.049 SLUGS/FT²-SEC P_δ = 857.12 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1491E 01	0.	0.9893E 00	0.6705E 00	0.	0.2378E-00	0.1000E 01
0.0057	0.4407E-00	0.1303E 01	0.503[illegible] 00	0.9500E 00	0.7670E 00	0.3859E-00	0.3304E-00	0.1000E 01
0.0133	0.5440E 00	0.1257E 01	0.6100E 00	0.9595E 00	0.7951E 00	0.4850E-00	0.3880E-00	0.1000E 01
0.0200	0.5757E 00	0.1242E 01	0.6416E 00	0.9624E 00	0.8051E 00	0.5166E 00	0.4098E-00	0.1000E 01
0.0267	0.5966E 00	0.1231E 01	0.6620E 00	0.9644E 00	0.8120E 00	0.5376E 00	0.4252E-00	0.1000E 01
0.0333	0.6132E 00	0.1223E 01	0.6781E 00	0.9660E 00	0.8177E 00	0.5545E 00	0.4383E-00	0.1000E 01
0.0400	0.6274E 00	0.1215E 01	0.6917E 00	0.9673E 00	0.8227E 00	0.5691E 00	0.4499E-00	0.1000E 01
0.0467	0.6411E 00	0.1206E 01	0.7041E 00	0.9669E 00	0.8291E 00	0.5838E 00	0.4613E-00	0.1000E 01
0.0533	0.6526E 00	0.1200E 01	0.7148E 00	0.9679E 00	0.8334E 00	0.5957E 00	0.4714E-00	0.1000E 01
0.0600	0.6623E 00	0.1194E 01	0.7238E 00	0.9688E 00	0.8370E 00	0.6059E 00	0.4803E-00	0.1000E 01
0.0667	0.6708E 00	0.1190E 01	0.7317E 00	0.9696E 00	0.8403E 00	0.6149E 00	0.4883E-00	0.1000E 01
0.1000	0.7043E 00	0.1171E 01	0.7623E 00	0.9727E 00	0.8535E 00	0.6507E 00	0.5216E 00	0.1000E 01
0.1333	0.7306E 00	0.1157E 01	0.7857E 00	0.9752E 00	0.8644E 00	0.6792E 00	0.5500E 00	0.1000E 01
0.1667	0.7523E 00	0.1144E 01	0.8047E 00	0.9772E 00	0.8737E 00	0.7031E 00	0.5752E 00	0.1000E 01
0.2000	0.7718E 00	0.1133E 01	0.8216E 00	0.9790E 00	0.8823E 00	0.7250E 00	0.5992E 00	0.1000E 01
0.2333	0.7900E 00	0.1123E 01	0.8371E 00	0.9807E 00	0.8905E 00	0.7455E 00	0.6228E 00	0.1000E 01
0.2667	0.8083E 00	0.1112E 01	0.8524E 00	0.9824E 00	0.8990E 00	0.7664E 00	0.6476E 00	0.1000E 01
0.3000	0.8277E 00	0.1101E 01	0.8685E 00	0.9842E 00	0.9082E 00	0.7888E 00	0.6756E 00	0.1000E 01
0.3333	0.8443E 00	0.1091E 01	0.8819E 00	0.9858E 00	0.9163E 00	0.8082E 00	0.7005E 00	0.1000E 01
0.3667	0.8601E 00	0.1082E 01	0.8947E 00	0.9872E 00	0.9241E 00	0.8268E 00	0.7254E 00	0.1000E 01
0.4000	0.8748E 00	0.1073E 01	0.9063E 00	0.9886E 00	0.9315E 00	0.8443E 00	0.7496E 00	0.1000E 01
0.4333	0.8896E 00	0.1065E 01	0.9179E 00	0.9900E 00	0.9391E 00	0.8621E 00	0.7750E 00	0.1000E 01
0.4667	0.9034E 00	0.1057E 01	0.9286E 00	0.9912E 00	0.9463E 00	0.8788E 00	0.7995E 00	0.1000E 01
0.5000	0.9162E 00	0.1049E 01	0.9384E 00	0.9924E 00	0.9531E 00	0.8945E 00	0.8232E 00	0.1000E 01
0.5333	0.9289E 00	0.1042E 01	0.9480E 00	0.9936E 00	0.9599E 00	0.9100E 00	0.8474E 00	0.1000E 01
0.5667	0.9413E 00	0.1034E 01	0.9573E 00	0.9947E 00	0.9666E 00	0.9255E 00	0.8720E 00	0.1000E 01
0.6000	0.9518E 00	0.1028E 01	0.9651E 00	0.9957E 00	0.9724E 00	0.9386E 00	0.8935E 00	0.1000E 01
0.6333	0.9612E 00	0.1023E 01	0.9720E 00	0.9965E 00	0.9777E 00	0.9504E 00	0.9131E 00	0.1000E 01
0.6667	0.9694E 00	0.1018E 01	0.9780E 00	0.9973E 00	0.9823E 00	0.9608E 00	0.9308E 00	0.1000E 01
0.7000	0.9776E 00	0.1013E 01	0.9840E 00	0.9980E 00	0.9869E 00	0.9712E 00	0.9488E 00	0.1000E 01
0.7333	0.9837E 00	0.1009E 01	0.9883E 00	0.9986E 00	0.9904E 00	0.9789E 00	0.9624E 00	0.1000E 01
0.7667	0.9894E 00	0.1006E 01	0.9924E 00	0.9991E 00	0.9937E 00	0.9862E 00	0.9753E 00	0.1000E 01
0.8000	0.9930E 00	0.1004E 01	0.9950E 00	0.9994E 00	0.9958E 00	0.9909E 00	0.9838E 00	0.1000E 01
0.8333	0.9957E 00	0.1002E 01	0.9969E 00	0.9997E 00	0.9973E 00	0.9944E 00	0.9899E 00	0.1000E 01
0.8667	0.9970E 00	0.1002E 01	0.9979E 00	0.9998E 00	0.9981E 00	0.9961E 00	0.9930E 00	0.1000E 01
0.9000	0.9977E 00	0.1001E 01	0.9983E 00	0.9998E 00	0.9985E 00	0.9969E 00	0.9946E 00	0.1000E 01
0.9333	0.9987E 00	0.1001E 01	0.9991E 00	0.9999E 00	0.9991E 00	0.9982E 00	0.9969E 00	0.1000E 01
0.9667	0.9993E 00	0.1000E 01	0.9995E 00	1.0000E 00	0.9995E 00	0.9991E 00	0.9985E 00	0.1000E 01
1.0000	1.0000E 00	0.9999E 00	1.0000E 00	0.1000E 01	0.9998E 00	0.9999E 00	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(b) $M_\infty = 1.61$ STATION 2 $T_w/T_\delta = 1.383$

$\delta = 0.650$ IN $M_\delta = 1.409$ $T_\delta = 390.4$ °R $U_\delta = 1364$ FT/SEC $T_{T_\delta} = 545.3$ °R

$\rho_\delta = 1.686 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.300$ SLUGS/FT² - SEC $P_\delta = 1129.53$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1384E 01	0.	0.9906E 00	0.7228E 00	0.	0.3106E-00	0.1000E 01
0.0077	0.5038E 00	0.1228E 01	0.5585E 00	0.9679E 00	0.8143E 00	0.4547E-00	0.4347E-00	0.1000E 01
0.0154	0.5642E 00	0.1202E 01	0.6186E 00	0.9690E 00	0.8322E 00	0.5148E 00	0.4711E-00	0.1000E 01
0.0231	0.5915E 00	0.1190E 01	0.6454E 00	0.9701E 00	0.8406E 00	0.5424E 00	0.4897E-00	0.1000E 01
0.0308	0.6096E 00	0.1182E 01	0.6628E 00	0.9708E 00	0.8463E 00	0.5609E 00	0.5028E 00	0.1000E 01
0.0385	0.6230E 00	0.1176E 01	0.6758E 00	0.9716E 00	0.8505E 00	0.5747E 00	0.5130E 00	0.1000E 01
0.0462	0.6331E 00	0.1171E 01	0.6854E 00	0.9720E 00	0.8538E 00	0.5851E 00	0.5208E 00	0.1000E 01
0.0538	0.6402E 00	0.1168E 01	0.6922E 00	0.9726E 00	0.8559E 00	0.5924E 00	0.5265E 00	0.1000E 01
0.0615	0.6462E 00	0.1166E 01	0.6980E 00	0.9731E 00	0.8578E 00	0.5986E 00	0.5314E 00	0.1000E 01
0.0692	0.6513E 00	0.1164E 01	0.7028E 00	0.9735E 00	0.8593E 00	0.6039E 00	0.5356E 00	0.1000E 01
0.0769	0.6562E 00	0.1162E 01	0.7075E 00	0.9739E 00	0.8609E 00	0.6090E 00	0.5397E 00	0.1000E 01
0.1154	0.6752E 00	0.1154E 01	0.7254E 00	0.9754E 00	0.8669E 00	0.6288E 00	0.5560E 00	0.1000E 01
0.1538	0.6953E 00	0.1145E 01	0.7442E 00	0.9770E 00	0.8734E 00	0.6499E 00	0.5743E 00	0.1000E 01
0.1923	0.7154E 00	0.1134E 01	0.7621E 00	0.9769E 00	0.8818E 00	0.6720E 00	0.5932E 00	0.1000E 01
0.2309	0.7367E 00	0.1125E 01	0.7815E 00	0.9786E 00	0.8892E 00	0.6949E 00	0.6147E 00	0.1000E 01
0.2692	0.7604E 00	0.1114E 01	0.8027E 00	0.9805E 00	0.8978E 00	0.7206E 00	0.6399E 00	0.1000E 01
0.3077	0.7902E 00	0.1100E 01	0.8291E 00	0.9830E 00	0.9090E 00	0.7535E 00	0.6740E 00	0.1000E 01
0.3462	0.8152E 00	0.1089E 01	0.8508E 00	0.9850E 00	0.9187E 00	0.7815E 00	0.7047E 00	0.1000E 01
0.3846	0.8384E 00	0.1078E 01	0.8706E 00	0.9869E 00	0.9280E 00	0.8078E 00	0.7349E 00	0.1000E 01
0.4231	0.8597E 00	0.1068E 01	0.8885E 00	0.9886E 00	0.9367E 00	0.8322E 00	0.7641E 00	0.1000E 01
0.4615	0.8803E 00	0.1058E 01	0.9056E 00	0.9903E 00	0.9454E 00	0.8561E 00	0.7939E 00	0.1000E 01
0.5000	0.8992E 00	0.1049E 01	0.9211E 00	0.9918E 00	0.9536E 00	0.8783E 00	0.8227E 00	0.1000E 01
0.5385	0.9162E 00	0.1040E 01	0.9348E 00	0.9932E 00	0.9611E 00	0.8984E 00	0.8497E 00	0.1000E 01
0.5769	0.9324E 00	0.1033E 01	0.9478E 00	0.9945E 00	0.9684E 00	0.9178E 00	0.8767E 00	0.1000E 01
0.6154	0.9470E 00	0.1026E 01	0.9593E 00	0.9957E 00	0.9751E 00	0.9353E 00	0.9017E 00	0.1000E 01
0.6538	0.9614E 00	0.1019E 01	0.9706E 00	0.9969E 00	0.9818E 00	0.9528E 00	0.9273E 00	0.1000E 01
0.6923	0.9725E 00	0.1013E 01	0.9792E 00	0.9978E 00	0.9870E 00	0.9663E 00	0.9476E 00	0.1000E 01
0.7308	0.9804E 00	0.1009E 01	0.9853E 00	0.9984E 00	0.9908E 00	0.9761E 00	0.9626E 00	0.1000E 01
0.7692	0.9860E 00	0.1007E 01	0.9896E 00	0.9987E 00	0.9935E 00	0.9830E 00	0.9733E 00	0.1000E 01
0.8077	0.9906E 00	0.1004E 01	0.9931E 00	0.9992E 00	0.9957E 00	0.9886E 00	0.9822E 00	0.1000E 01
0.8462	0.9942E 00	0.1003E 01	0.9958E 00	0.9995E 00	0.9974E 00	0.9931E 00	0.9892E 00	0.1000E 01
0.8846	0.9961E 00	0.1002E 01	0.9973E 00	0.9997E 00	0.9983E 00	0.9955E 00	0.9930E 00	0.1000E 01
0.9231	0.9977E 00	0.1001E 01	0.9985E 00	0.9998E 00	0.9991E 00	0.9975E 00	0.9962E 00	0.1000E 01
0.9615	0.9987E 00	0.1000E 01	0.9992E 00	0.9999E 00	0.9996E 00	0.9987E 00	0.9982E 00	0.1000E 01
1.0000	0.9997E 00	1.0000E 00	1.0000E 00	1.0000E 00	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(c) M_∞ = 1.61 STATION 4 T_w/T_δ = 1.409

δ = 0.675 IN M_δ = 1.467 T_δ = 379.8 °R U_δ = 1401 FT/SEC T_{T_δ} = 543.2 °R

ρ_δ = 1.620 $\times 10^{-3}$ SLUGS/FT^3 $\rho_\delta U_\delta$ = 2.269 SLUGS/FT^2-SEC P_δ = 1055.68 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1410E 01	0.	0.9857E 00	0.7093E 00	0.	0.2858E-00	0.1000E 01
0.0074	0.4526E-00	0.1274E 01	0.5110E 00	0.9695E 00	0.7846E 00	0.4010E-00	0.3842E-00	0.1000E 01
0.0148	0.5516E 00	0.1228E 01	0.6113E 00	0.9708E 00	0.8144E 00	0.4980E-00	0.4397E-00	0.1000E 01
0.0222	0.6210E 00	0.1192E 01	0.6781E 00	0.9720E 00	0.8386E 00	0.5688E 00	0.4892E-00	0.1000E 01
0.0296	0.6527E 00	0.1176E 01	0.7079E 00	0.9729E 00	0.8503E 00	0.6021E 00	0.5153E 00	0.1000E 01
0.0370	0.6729E 00	0.1166E 01	0.7266E 00	0.9739E 00	0.8578E 00	0.6234E 00	0.5331E 00	0.1000E 01
0.0444	0.6875E 00	0.1158E 01	0.7401E 00	0.9748E 00	0.8631E 00	0.6390E 00	0.5463E 00	0.1000E 01
0.0519	0.6973E 00	0.1154E 01	0.7491E 00	0.9756E 00	0.8666E 00	0.6494E 00	0.5556E 00	0.1000E 01
0.0593	0.7055E 00	0.1150E 01	0.7566E 00	0.9762E 00	0.8696E 00	0.6581E 00	0.5636E 00	0.1000E 01
0.0667	0.7123E 00	0.1147E 01	0.7628E 00	0.9767E 00	0.8721E 00	0.6654E 00	0.5703E 00	0.1000E 01
0.0741	0.7180E 00	0.1144E 01	0.7680E 00	0.9772E 00	0.8742E 00	0.6715E 00	0.5761E 00	0.1000E 01
0.1111	0.7404E 00	0.1133E 01	0.7882E 00	0.9790E 00	0.8826E 00	0.6959E 00	0.5997E 00	0.1000E 01
0.1481	0.7584E 00	0.1124E 01	0.8042E 00	0.9804E 00	0.8896E 00	0.7156E 00	0.6196E 00	0.1000E 01
0.1852	0.7753E 00	0.1116E 01	0.8190E 00	0.9818E 00	0.8963E 00	0.7343E 00	0.6393E 00	0.1000E 01
0.2222	0.7930E 00	0.1107E 01	0.8344E 00	0.9832E 00	0.9035E 00	0.7541E 00	0.6608E 00	0.1000E 01
0.2593	0.8119E 00	0.1097E 01	0.8506E 00	0.9848E 00	0.9114E 00	0.7754E 00	0.6849E 00	0.1000E 01
0.2963	0.8330E 00	0.1086E 01	0.8683E 00	0.9865E 00	0.9203E 00	0.7994E 00	0.7131E 00	0.1000E 01
0.3333	0.8554E 00	0.1075E 01	0.8870E 00	0.9883E 00	0.9302E 00	0.8253E 00	0.7450E 00	0.1000E 01
0.3704	0.8735E 00	0.1066E 01	0.9018E 00	0.9898E 00	0.9383E 00	0.8464E 00	0.7719E 00	0.1000E 01
0.4074	0.8906E 00	0.1057E 01	0.9157E 00	0.9912E 00	0.9461E 00	0.8666E 00	0.7988E 00	0.1000E 01
0.4444	0.9067E 00	0.1048E 01	0.9285E 00	0.9925E 00	0.9536E 00	0.8857E 00	0.8250E 00	0.1000E 01
0.4815	0.9232E 00	0.1040E 01	0.9416E 00	0.9938E 00	0.9615E 00	0.9055E 00	0.8530E 00	0.1000E 01
0.5185	0.9379E 00	0.1032E 01	0.9530E 00	0.9950E 00	0.9686E 00	0.9234E 00	0.8791E 00	0.1000E 01
0.5556	0.9527E 00	0.1025E 01	0.9645E 00	0.9962E 00	0.9759E 00	0.9415E 00	0.9063E 00	0.1000E 01
0.5926	0.9649E 00	0.1018E 01	0.9738E 00	0.9972E 00	0.9820E 00	0.9565E 00	0.9295E 00	0.1000E 01
0.6296	0.9753E 00	0.1013E 01	0.9816E 00	0.9981E 00	0.9872E 00	0.9694E 00	0.9498E 00	0.1000E 01
0.6667	0.9829E 00	0.1009E 01	0.9874E 00	0.9987E 00	0.9911E 00	0.9789E 00	0.9650E 00	0.1000E 01
0.7037	0.9878E 00	0.1006E 01	0.9911E 00	0.9991E 00	0.9936E 00	0.9850E 00	0.9750E 00	0.1000E 01
0.7407	0.9921E 00	0.1004E 01	0.9942E 00	0.9994E 00	0.9958E 00	0.9903E 00	0.9837E 00	0.1000E 01
0.7778	0.9944E 00	0.1003E 01	0.9960E 00	0.9996E 00	0.9970E 00	0.9933E 00	0.9885E 00	0.1000E 01
0.8148	0.9967E 00	0.1002E 01	0.9976E 00	0.9998E 00	0.9982E 00	0.9961E 00	0.9932E 00	0.1000E 01
0.8519	0.9977E 00	0.1001E 01	0.9984E 00	0.9999E 00	0.9987E 00	0.9974E 00	0.9953E 00	0.1000E 01
0.8889	0.9986E 00	0.1001E 01	0.9991E 00	1.0000E 00	0.9992E 00	0.9986E 00	0.9973E 00	0.1000E 01
0.9259	0.9990E 00	0.1000E 01	0.9993E 00	1.0000E 00	0.9994E 00	0.9990E 00	0.9980E 00	0.1000E 01
0.9630	0.9996E 00	0.1000E 01	0.9998E 00	0.1000E 01	0.9997E 00	0.9998E 00	0.9994E 00	0.1000E 01
1.0000	0.9994E 00	1.0000E 00	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(d) $M_\infty = 1.61$ STATION 6 $T_w/T_\delta = 1.424$

$\delta = 0.600$ IN $M_\delta = 1.505$ $T_\delta = 379.4$ °R $U_\delta = 1437$ FT/SEC $T_{T_\delta} = 551.4$ °R

$\rho_\delta = 1.509 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.168$ SLUGS/FT² - SEC $P_\delta = 982.48$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1425E 01	0.	0.9804E 00	0.6902E 00	0.	0.2659E-00	0.9834E 00
0.0083	0.4645E-00	0.1280E 01	0.5253E 00	0.9664E 00	0.7687E 00	0.4039E-00	0.3686E-00	0.9835E 00
0.0167	0.5818E 00	0.1221E 01	0.6427E 00	0.9686E 00	0.8059E 00	0.5181E 00	0.4383E-00	0.9837E 00
0.0250	0.6276E 00	0.1197E 01	0.6865E 00	0.9706E 00	0.8219E 00	0.5644E 00	0.4726E-00	0.9838E 00
0.0333	0.6578E 00	0.1181E 01	0.7148E 00	0.9721E 00	0.8330E 00	0.5956E 00	0.4979E-00	0.9839E 00
0.0417	0.6828E 00	0.1168E 01	0.7378E 00	0.9735E 00	0.8425E 00	0.6217E 00	0.5201E 00	0.9841E 00
0.0500	0.7011E 00	0.1159E 01	0.7546E 00	0.9750E 00	0.8493E 00	0.6410E 00	0.5377E 00	0.9842E 00
0.0583	0.7163E 00	0.1151E 01	0.7684E 00	0.9762E 00	0.8551E 00	0.6572E 00	0.5529E 00	0.9843E 00
0.0667	0.7237E 00	0.1147E 01	0.7751E 00	0.9769E 00	0.8580E 00	0.6652E 00	0.5606E 00	0.9845E 00
0.0750	0.7386E 00	0.1140E 01	0.7884E 00	0.9781E 00	0.8639E 00	0.6812E 00	0.5765E 00	0.9846E 00
0.0833	0.7463E 00	0.1136E 01	0.7952E 00	0.9787E 00	0.8671E 00	0.6897E 00	0.5850E 00	0.9848E 00
0.1250	0.7746E 00	0.1121E 01	0.8200E 00	0.9811E 00	0.8791E 00	0.7210E 00	0.6180E 00	0.9855E 00
0.1667	0.7962E 00	0.1110E 01	0.8386E 00	0.9829E 00	0.8887E 00	0.7454E 00	0.6450E 00	0.9861E 00
0.2083	0.8155E 00	0.1100E 01	0.8549E 00	0.9845E 00	0.8976E 00	0.7675E 00	0.6705E 00	0.9868E 00
0.2500	0.8335E 00	0.1090E 01	0.8700E 00	0.9860E 00	0.9061E 00	0.7885E 00	0.6957E 00	0.9875E 00
0.2917	0.8505E 00	0.1081E 01	0.8841E 00	0.9874E 00	0.9144E 00	0.8085E 00	0.7204E 00	0.9882E 00
0.3333	0.8667E 00	0.1072E 01	0.8972E 00	0.9888E 00	0.9224E 00	0.8277E 00	0.7451E 00	0.9889E 00
0.3750	0.8828E 00	0.1064E 01	0.9102E 00	0.9901E 00	0.9306E 00	0.8472E 00	0.7708E 00	0.9896E 00
0.4167	0.8986E 00	0.1055E 01	0.9228E 00	0.9914E 00	0.9388E 00	0.8665E 00	0.7971E 00	0.9903E 00
0.4583	0.9130E 00	0.1047E 01	0.9341E 00	0.9926E 00	0.9464E 00	0.8842E 00	0.8220E 00	0.9910E 00
0.5000	0.9270E 00	0.1040E 01	0.9450E 00	0.9938E 00	0.9539E 00	0.9017E 00	0.8474E 00	0.9917E 00
0.5417	0.9409E 00	0.1032E 01	0.9557E 00	0.9950E 00	0.9615E 00	0.9191E 00	0.8732E 00	0.9924E 00
0.5833	0.9530E 00	0.1026E 01	0.9649E 00	0.9960E 00	0.9684E 00	0.9346E 00	0.8969E 00	0.9931E 00
0.6250	0.9637E 00	0.1020E 01	0.9730E 00	0.9969E 00	0.9745E 00	0.9484E 00	0.9182E 00	0.9938E 00
0.6667	0.9722E 00	0.1015E 01	0.9793E 00	0.9976E 00	0.9796E 00	0.9596E 00	0.9358E 00	0.9945E 00
0.7083	0.9792E 00	0.1011E 01	0.9846E 00	0.9982E 00	0.9840E 00	0.9690E 00	0.9508E 00	0.9952E 00
0.7500	0.9845E 00	0.1009E 01	0.9885E 00	0.9986E 00	0.9875E 00	0.9763E 00	0.9624E 00	0.9958E 00
0.7917	0.9884E 00	0.1006E 01	0.9914E 00	0.9989E 00	0.9902E 00	0.9819E 00	0.9713E 00	0.9965E 00
0.8333	0.9926E 00	0.1004E 01	0.9945E 00	0.9993E 00	0.9932E 00	0.9879E 00	0.9809E 00	0.9972E 00
0.8750	0.9955E 00	0.1003E 01	0.9966E 00	0.9995E 00	0.9954E 00	0.9922E 00	0.9878E 00	0.9979E 00
0.9167	0.9980E 00	0.1001E 01	0.9984E 00	0.9998E 00	0.9975E 00	0.9961E 00	0.9940E 00	0.9986E 00
0.9583	0.9993E 00	0.1001E 01	0.9993E 00	0.9999E 00	0.9988E 00	0.9983E 00	0.9973E 00	0.9993E 00
1.0000	0.1000E 01	0.1000E 01	1.0000E 00	0.9999E 00	1.0000E 00	0.1000E 01	1.0000E 00	0.1000E 01

TABLE VI - CONTINUED.

(e) $M_\infty = 1.61$ STATION 8 $T_w/T_\delta = 1.450$

$\delta = 0.550$ IN $M_\delta = 1.570$ $T_\delta = 368.0$ °R $U_\delta = 1476$ FT/SEC $T_{T_\delta} = 549.4$ °R

$\rho_\delta = 1.432 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.113$ SLUGS/FT²-SEC $P_\delta = 904.08$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1451E 01	0.	0.9719E 00	0.6723E 00	0.	0.2402E-00	0.9757E 00
0.0091	0.6044E 00	0.1232E 01	0.6708E 00	0.9736E 00	0.7921E 00	0.5315E 00	0.4288E-00	0.9759E 00
0.0182	0.6623E 00	0.1196E 01	0.7245E 00	0.9747E 00	0.8157E 00	0.5911E 00	0.4765E-00	0.9761E 00
0.0273	0.6892E 00	0.1181E 01	0.7489E 00	0.9760E 00	0.8268E 00	0.6193E 00	0.5016E 00	0.9763E 00
0.0364	0.7082E 00	0.1169E 01	0.7659E 00	0.9769E 00	0.8350E 00	0.6396E 00	0.5206E 00	0.9765E 00
0.0455	0.7234E 00	0.1160E 01	0.7793E 00	0.9778E 00	0.8415E 00	0.6560E 00	0.5366E 00	0.9768E 00
0.0545	0.7373E 00	0.1152E 01	0.7914E 00	0.9783E 00	0.8480E 00	0.6713E 00	0.5519E 00	0.9770E 00
0.0636	0.7495E 00	0.1145E 01	0.8021E 00	0.9793E 00	0.8533E 00	0.6846E 00	0.5658E 00	0.9772E 00
0.0727	0.7601E 00	0.1139E 01	0.8112E 00	0.9802E 00	0.8580E 00	0.6963E 00	0.5782E 00	0.9774E 00
0.0818	0.7698E 00	0.1133E 01	0.8196E 00	0.9809E 00	0.8624E 00	0.7070E 00	0.5899E 00	0.9776E 00
0.0909	0.7780E 00	0.1129E 01	0.8266E 00	0.9816E 00	0.8662E 00	0.7162E 00	0.6001E 00	0.9779E 00
0.1364	0.8064E 00	0.1112E 01	0.8506E 00	0.9840E 00	0.8799E 00	0.7486E 00	0.6375E 00	0.9790E 00
0.1818	0.8260E 00	0.1101E 01	0.8668E 00	0.9856E 00	0.8899E 00	0.7716E 00	0.6653E 00	0.9801E 00
0.2273	0.8417E 00	0.1092E 01	0.8796E 00	0.9869E 00	0.8983E 00	0.7904E 00	0.6888E 00	0.9812E 00
0.2727	0.8552E 00	0.1084E 01	0.8905E 00	0.9880E 00	0.9059E 00	0.8069E 00	0.7101E 00	0.9823E 00
0.3182	0.8676E 00	0.1077E 01	0.9004E 00	0.9890E 00	0.9130E 00	0.8223E 00	0.7303E 00	0.9834E 00
0.3636	0.8809E 00	0.1069E 01	0.9109E 00	0.9901E 00	0.9206E 00	0.8388E 00	0.7527E 00	0.9845E 00
0.4091	0.8944E 00	0.1061E 01	0.9214E 00	0.9912E 00	0.9285E 00	0.8558E 00	0.7764E 00	0.9856E 00
0.4545	0.9076E 00	0.1054E 01	0.9317E 00	0.9923E 00	0.9363E 00	0.8726E 00	0.8005E 00	0.9867E 00
0.5000	0.9192E 00	0.1047E 01	0.9405E 00	0.9933E 00	0.9434E 00	0.8876E 00	0.8224E 00	0.9878E 00
0.5455	0.9310E 00	0.1040E 01	0.9495E 00	0.9943E 00	0.9507E 00	0.9029E 00	0.8453E 00	0.9889E 00
0.5909	0.9425E 00	0.1033E 01	0.9581E 00	0.9952E 00	0.9579E 00	0.9181E 00	0.8686E 00	0.9901E 00
0.6364	0.9521E 00	0.1028E 01	0.9653E 00	0.9960E 00	0.9642E 00	0.9310E 00	0.8887E 00	0.9912E 00
0.6818	0.9616E 00	0.1022E 01	0.9723E 00	0.9968E 00	0.9705E 00	0.9439E 00	0.9091E 00	0.9923E 00
0.7273	0.9699E 00	0.1017E 01	0.9784E 00	0.9975E 00	0.9762E 00	0.9554E 00	0.9276E 00	0.9934E 00
0.7727	0.9782E 00	0.1013E 01	0.9844E 00	0.9982E 00	0.9819E 00	0.9668E 00	0.9464E 00	0.9945E 00
0.8182	0.9857E 00	0.1008E 01	0.9898E 00	0.9988E 00	0.9872E 00	0.9774E 00	0.9638E 00	0.9956E 00
0.8636	0.9920E 00	0.1005E 01	0.9943E 00	0.9993E 00	0.9920E 00	0.9867E 00	0.9792E 00	0.9967E 00
0.9091	0.9954E 00	0.1003E 01	0.9967E 00	0.9996E 00	0.9950E 00	0.9920E 00	0.9879E 00	0.9978E 00
0.9545	0.9981E 00	0.1001E 01	0.9986E 00	0.9998E 00	0.9976E 00	0.9966E 00	0.9951E 00	0.9989E 00
1.0000	0.9997E 00	0.1000E 01	0.9998E 00	1.0000E 00	0.9997E 00	0.9998E 00	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(f) $M_\infty = 1.61$ STATION 10 $T_w/T_\delta = 1.492$

$\delta = 0.625$ IN $M_\delta = 1.626$ $T_\delta = 357.3$ °R $U_\delta = 1506$ FT/SEC $T_{T_\delta} = 546.3$ °R

$\rho_\delta = 1.368 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.060$ SLUGS/FT²-SEC $P_\delta = 838.49$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1492E 01	0.	0.9759E 00	0.6488E 00	0.	0.2192E-00	0.9683E 00
0.0080	0.6067E 00	0.1242E 01	0.6764E 00	0.9707E 00	0.7794E 00	0.5272E 00	0.4086E-00	0.9686E 00
0.0160	0.6523E 00	0.1214E 01	0.7187E 00	0.9723E 00	0.7981E 00	0.5737E 00	0.4460E-00	0.9688E 00
0.0240	0.6826E 00	0.1195E 01	0.7462E 00	0.9738E 00	0.8109E 00	0.6052E 00	0.4740E-00	0.9691E 00
0.0320	0.7063E 00	0.1179E 01	0.7672E 00	0.9748E 00	0.8217E 00	0.6305E 00	0.4978E-00	0.9693E 00
0.0400	0.7247E 00	0.1168E 01	0.7834E 00	0.9759E 00	0.8300E 00	0.6503E 00	0.5174E 00	0.9696E 00
0.0480	0.7402E 00	0.1158E 01	0.7967E 00	0.9768E 00	0.8373E 00	0.6671E 00	0.5347E 00	0.9698E 00
0.0560	0.7536E 00	0.1150E 01	0.8083E 00	0.9780E 00	0.8433E 00	0.6818E 00	0.5504E 00	0.9701E 00
0.0640	0.7649E 00	0.1143E 01	0.8180E 00	0.9790E 00	0.8486E 00	0.6942E 00	0.5641E 00	0.9704E 00
0.0720	0.7751E 00	0.1137E 01	0.8267E 00	0.9799E 00	0.8534E 00	0.7056E 00	0.5770E 00	0.9706E 00
0.0800	0.7832E 00	0.1132E 01	0.8335E 00	0.9806E 00	0.8573E 00	0.7147E 00	0.5873E 00	0.9709E 00
0.1200	0.8142E 00	0.1113E 01	0.8593E 00	0.9834E 00	0.8729E 00	0.7502E 00	0.6299E 00	0.9721E 00
0.1600	0.8362E 00	0.1100E 01	0.8772E 00	0.9853E 00	0.8847E 00	0.7761E 00	0.6626E 00	0.9734E 00
0.2000	0.8530E 00	0.1090E 01	0.8906E 00	0.9868E 00	0.8942E 00	0.7964E 00	0.6892E 00	0.9747E 00
0.2400	0.8673E 00	0.1081E 01	0.9019E 00	0.9881E 00	0.9026E 00	0.8141E 00	0.7131E 00	0.9759E 00
0.2800	0.8798E 00	0.1073E 01	0.9117E 00	0.9892E 00	0.9102E 00	0.8299E 00	0.7350E 00	0.9772E 00
0.3200	0.8915E 00	0.1066E 01	0.9207E 00	0.9903E 00	0.9175E 00	0.8448E 00	0.7561E 00	0.9785E 00
0.3600	0.9019E 00	0.1060E 01	0.9287E 00	0.9912E 00	0.9242E 00	0.8584E 00	0.7756E 00	0.9797E 00
0.4000	0.9121E 00	0.1053E 01	0.9364E 00	0.9921E 00	0.9309E 00	0.8718E 00	0.7954E 00	0.9810E 00
0.4400	0.9221E 00	0.1047E 01	0.9439E 00	0.9930E 00	0.9376E 00	0.8851E 00	0.8154E 00	0.9823E 00
0.4800	0.9317E 00	0.1042E 01	0.9510E 00	0.9939E 00	0.9440E 00	0.8979E 00	0.8351E 00	0.9836E 00
0.5200	0.9415E 00	0.1036E 01	0.9583E 00	0.9947E 00	0.9507E 00	0.9111E 00	0.8557E 00	0.9848E 00
0.5600	0.9500E 00	0.1030E 01	0.9645E 00	0.9955E 00	0.9567E 00	0.9229E 00	0.8745E 00	0.9861E 00
0.6000	0.9578E 00	0.1026E 01	0.9702E 00	0.9962E 00	0.9624E 00	0.9338E 00	0.8920E 00	0.9874E 00
0.6400	0.9662E 00	0.1021E 01	0.9762E 00	0.9969E 00	0.9684E 00	0.9455E 00	0.9112E 00	0.9886E 00
0.6800	0.9744E 00	0.1016E 01	0.9822E 00	0.9977E 00	0.9745E 00	0.9572E 00	0.9306E 00	0.9899E 00
0.7200	0.9809E 00	0.1012E 01	0.9868E 00	0.9982E 00	0.9795E 00	0.9667E 00	0.9464E 00	0.9912E 00
0.7600	0.9866E 00	0.1008E 01	0.9908E 00	0.9987E 00	0.9841E 00	0.9752E 00	0.9608E 00	0.9924E 00
0.8000	0.9900E 00	0.1006E 01	0.9932E 00	0.9990E 00	0.9874E 00	0.9807E 00	0.9698E 00	0.9937E 00
0.8400	0.9929E 00	0.1004E 01	0.9953E 00	0.9993E 00	0.9904E 00	0.9858E 00	0.9780E 00	0.9950E 00
0.8800	0.9955E 00	0.1003E 01	0.9971E 00	0.9995E 00	0.9932E 00	0.9904E 00	0.9855E 00	0.9962E 00
0.9200	0.9975E 00	0.1002E 01	0.9985E 00	0.9997E 00	0.9957E 00	0.9943E 00	0.9914E 00	0.9975E 00
0.9600	0.9988E 00	0.1001E 01	0.9994E 00	0.9998E 00	0.9977E 00	0.9972E 00	0.9957E 00	0.9988E 00
1.0000	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.9997E 00	0.1000E 01	1.0000E 00	0.1000E 01

TABLE VI - CONTINUED.

(g) $M_\infty = 1.61$ STATION 12 $T_w/T_\delta = 1.513$

$\delta = 0.625$ IN $M_\delta = 1.653$ $T_\delta = 353.8$ °R $U_\delta = 1524$ FT/SEC $T_{T_\delta} = 547.3$ °R

$\rho_\delta = 1.322 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.015$ SLUGS/FT²-SEC $P_\delta = 802.46$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1513E 01	0.	0.9783E 00	0.6478E 00	0.	0.2131E-00	0.9805E 00
0.0080	0.6082E 00	0.1186E 01	0.6623E 00	0.9216E 00	0.8267E 00	0.5474E 00	0.4058E-00	0.9806E 00
0.0160	0.6480E 00	0.1139E 01	0.7343E 00	0.9271E 00	0.8606E 00	0.6319E 00	0.4767E-00	0.9808E 00
0.0240	0.7214E 00	0.1123E 01	0.7645E 00	0.9326E 00	0.8732E 00	0.6675E 00	0.5119E 00	0.9809E 00
0.0320	0.7397E 00	0.1115E 01	0.7811E 00	0.9366E 00	0.8795E 00	0.6869E 00	0.5326E 00	0.9811E 00
0.0400	0.7511E 00	0.1114E 01	0.7927E 00	0.9423E 00	0.8805E 00	0.6979E 00	0.5461E 00	0.9813E 00
0.0480	0.7608E 00	0.1113E 01	0.8026E 00	0.9472E 00	0.8816E 00	0.7074E 00	0.5581E 00	0.9814E 00
0.0560	0.7691E 00	0.1112E 01	0.8109E 00	0.9511E 00	0.8827E 00	0.7157E 00	0.5685E 00	0.9816E 00
0.0640	0.7767E 00	0.1111E 01	0.8186E 00	0.9548E 00	0.8836E 00	0.7232E 00	0.5783E 00	0.9817E 00
0.0720	0.7842E 00	0.1109E 01	0.8258E 00	0.9580E 00	0.8851E 00	0.7308E 00	0.5881E 00	0.9819E 00
0.0800	0.7909E 00	0.1108E 01	0.8323E 00	0.9609E 00	0.8864E 00	0.7376E 00	0.5972E 00	0.9820E 00
0.1200	0.8204E 00	0.1099E 01	0.8601E 00	0.9720E 00	0.8939E 00	0.7687E 00	0.6392E 00	0.9828E 00
0.1600	0.8422E 00	0.1092E 01	0.8799E 00	0.9794E 00	0.9007E 00	0.7924E 00	0.6727E 00	0.9836E 00
0.2000	0.8597E 00	0.1084E 01	0.8952E 00	0.9841E 00	0.9076E 00	0.8124E 00	0.7014E 00	0.9844E 00
0.2400	0.8729E 00	0.1078E 01	0.9062E 00	0.9871E 00	0.9137E 00	0.8279E 00	0.7240E 00	0.9852E 00
0.2800	0.8859E 00	0.1071E 01	0.9167E 00	0.9893E 00	0.9204E 00	0.8436E 00	0.7471E 00	0.9859E 00
0.3200	0.8971E 00	0.1064E 01	0.9254E 00	0.9907E 00	0.9268E 00	0.8576E 00	0.7679E 00	0.9867E 00
0.3600	0.9073E 00	0.1058E 01	0.9332E 00	0.9916E 00	0.9332E 00	0.8707E 00	0.7876E 00	0.9875E 00
0.4000	0.9171E 00	0.1052E 01	0.9405E 00	0.9925E 00	0.9394E 00	0.8833E 00	0.8068E 00	0.9883E 00
0.4400	0.9271E 00	0.1046E 01	0.9479E 00	0.9934E 00	0.9457E 00	0.8963E 00	0.8271E 00	0.9891E 00
0.4800	0.9362E 00	0.1040E 01	0.9546E 00	0.9942E 00	0.9517E 00	0.9083E 00	0.8462E 00	0.9898E 00
0.5200	0.9448E 00	0.1035E 01	0.9609E 00	0.9950E 00	0.9574E 00	0.9198E 00	0.8649E 00	0.9906E 00
0.5600	0.9530E 00	0.1029E 01	0.9668E 00	0.9957E 00	0.9629E 00	0.9308E 00	0.8830E 00	0.9914E 00
0.6000	0.9611E 00	0.1024E 01	0.9726E 00	0.9965E 00	0.9684E 00	0.9418E 00	0.9013E 00	0.9922E 00
0.6400	0.9677E 00	0.1020E 01	0.9774E 00	0.9970E 00	0.9731E 00	0.9510E 00	0.9168E 00	0.9930E 00
0.6800	0.9750E 00	0.1016E 01	0.9825E 00	0.9977E 00	0.9782E 00	0.9610E 00	0.9339E 00	0.9938E 00
0.7200	0.9808E 00	0.1012E 01	0.9866E 00	0.9982E 00	0.9825E 00	0.9692E 00	0.9481E 00	0.9945E 00
0.7600	0.9845E 00	0.1010E 01	0.9892E 00	0.9985E 00	0.9855E 00	0.9747E 00	0.9575E 00	0.9953E 00
0.8000	0.9892E 00	0.1007E 01	0.9925E 00	0.9990E 00	0.9891E 00	0.9816E 00	0.9695E 00	0.9961E 00
0.8400	0.9932E 00	0.1004E 01	0.9953E 00	0.9993E 00	0.9923E 00	0.9875E 00	0.9798E 00	0.9969E 00
0.8800	0.9960E 00	0.1003E 01	0.9972E 00	0.9996E 00	0.9948E 00	0.9919E 00	0.9873E 00	0.9977E 00
0.9700	0.9978E 00	0.1002E 01	0.9984E 00	0.9997E 00	0.9967E 00	0.9950E 00	0.9924E 00	0.9984E 00
0.9600	0.9990E 00	0.1001E 01	0.9993E 00	0.9998E 00	0.9982E 00	0.9974E 00	0.9962E 00	0.9992E 00
1.0000	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.9997E 00	0.9998E 00	0.1000E 01	1.0000E 00

TABLE VI - CONTINUED.

(h) $M_\infty = 2.58$ STATION 6 $T_w/T_\delta = 1.934$

$\delta = 0.900$ IN $M_\delta = 2.351$ $T_\delta = 266.0$ °R $U_\delta = 1879$ FT/SEC $T_{T_\delta} = 560.0$ °R

$\rho_\delta = 1.018 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.913$ SLUGS/FT²-SEC $P_\delta = 464.74$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1935E 01	0.	0.9192E 00	0.4707E-00	0.	0.6725E-01	0.9108E 00
0.0056	0.5257E 00	0.1488E 01	0.6413E 00	0.9227E 00	0.6125E 00	0.3928E-00	0.1710E-00	0.9113E 00
0.0111	0.5867E 00	0.1413E 01	0.6976E 00	0.9268E 00	0.6452E 00	0.4500E-00	0.2080E-00	0.9118E 00
0.0167	0.6198E 00	0.1376E 01	0.7271E 00	0.9311E 00	0.6631E 00	0.4821E-00	0.2324E-00	0.9123E 00
0.0222	0.6415E 00	0.1354E 01	0.7465E 00	0.9356E 00	0.6743E 00	0.5033E 00	0.2503E-00	0.9127E 00
0.0278	0.6572E 00	0.1340E 01	0.7609E 00	0.9405E 00	0.6815E 00	0.5185E 00	0.2643E-00	0.9132E 00
0.0333	0.6704E 00	0.1328E 01	0.7728E 00	0.9444E 00	0.6880E 00	0.5316E 00	0.2768E-00	0.9137E 00
0.0389	0.6818E 00	0.1318E 01	0.7828E 00	0.9478E 00	0.6937E 00	0.5430E 00	0.2881E-00	0.9142E 00
0.0444	0.6921E 00	0.1308E 01	0.7918E 00	0.9506E 00	0.6992E 00	0.5536E 00	0.2988E-00	0.9147E 00
0.0500	0.7007E 00	0.1300E 01	0.7991E 00	0.9529E 00	0.7039E 00	0.5625E 00	0.3081E-00	0.9152E 00
0.0556	0.7088E 00	0.1292E 01	0.8059E 00	0.9547E 00	0.7087E 00	0.5711E 00	0.3172E-00	0.9157E 00
0.0833	0.7386E 00	0.1263E 01	0.8302E 00	0.9619E 00	0.7269E 00	0.6035E 00	0.3535E-00	0.9182E 00
0.1111	0.7624E 00	0.1240E 01	0.8489E 00	0.9672E 00	0.7428E 00	0.6305E 00	0.3860E-00	0.9207E 00
0.1389	0.7825E 00	0.1219E 01	0.8642E 00	0.9713E 00	0.7572E 00	0.6543E 00	0.4162E-00	0.9232E 00
0.1667	0.8000E 00	0.1202E 01	0.8771E 00	0.9747E 00	0.7703E 00	0.6756E 00	0.4445E-00	0.9256E 00
0.1944	0.8177E 00	0.1184E 01	0.8896E 00	0.9777E 00	0.7843E 00	0.6977E 00	0.4752E-00	0.9281E 00
0.2222	0.8342E 00	0.1166E 01	0.9011E 00	0.9803E 00	0.7979E 00	0.7189E 00	0.5061E 00	0.9306E 00
0.2500	0.8501E 00	0.1150E 01	0.9116E 00	0.9824E 00	0.8116E 00	0.7398E 00	0.5377E 00	0.9331E 00
0.2778	0.8657E 00	0.1134E 01	0.9218E 00	0.9846E 00	0.8254E 00	0.7608E 00	0.5709E 00	0.9355E 00
0.3056	0.8796E 00	0.1119E 01	0.9307E 00	0.9863E 00	0.8382E 00	0.7800E 00	0.6023E 00	0.9380E 00
0.3333	0.8919E 00	0.1107E 01	0.9383E 00	0.9878E 00	0.8500E 00	0.7975E 00	0.6318E 00	0.9405E 00
0.3611	0.9026E 00	0.1096E 01	0.9449E 00	0.9891E 00	0.8608E 00	0.8133E 00	0.6590E 00	0.9430E 00
0.3889	0.9116E 00	0.1087E 01	0.9503E 00	0.9902E 00	0.8703E 00	0.8270E 00	0.6828E 00	0.9455E 00
0.4167	0.9195E 00	0.1078E 01	0.9550E 00	0.9911E 00	0.8791E 00	0.8395E 00	0.7050E 00	0.9479E 00
0.4444	0.9255E 00	0.1072E 01	0.9585E 00	0.9917E 00	0.8863E 00	0.8495E 00	0.7224E 00	0.9504E 00
0.4722	0.9311E 00	0.1067E 01	0.9618E 00	0.9924E 00	0.8934E 00	0.8592E 00	0.7395E 00	0.9529E 00
0.5000	0.9375E 00	0.1060E 01	0.9655E 00	0.9931E 00	0.9011E 00	0.8699E 00	0.7590E 00	0.9554E 00
0.5278	0.9415E 00	0.1056E 01	0.9679E 00	0.9936E 00	0.9068E 00	0.8776E 00	0.7724E 00	0.9578E 00
0.5556	0.9469E 00	0.1051E 01	0.9709E 00	0.9942E 00	0.9138E 00	0.8871E 00	0.7898E 00	0.9603E 00
0.5833	0.9505E 00	0.1048E 01	0.9730E 00	0.9946E 00	0.9192E 00	0.8943E 00	0.8025E 00	0.9628E 00
0.6111	0.9558E 00	0.1042E 01	0.9760E 00	0.9951E 00	0.9262E 00	0.9038E 00	0.8203E 00	0.9653E 00
0.6389	0.9599E 00	0.1038E 01	0.9783E 00	0.9956E 00	0.9321E 00	0.9118E 00	0.8349E 00	0.9678E 00
0.6667	0.9634E 00	0.1035E 01	0.9802E 00	0.9960E 00	0.9376E 00	0.9190E 00	0.8480E 00	0.9702E 00
0.6944	0.9669E 00	0.1032E 01	0.9822E 00	0.9964E 00	0.9431E 00	0.9262E 00	0.8612E 00	0.9727E 00
0.7222	0.9713E 00	0.1027E 01	0.9846E 00	0.9969E 00	0.9494E 00	0.9346E 00	0.8773E 00	0.9752E 00
0.7500	0.9746E 00	0.1024E 01	0.9864E 00	0.9972E 00	0.9548E 00	0.9417E 00	0.8903E 00	0.9777E 00
0.7778	0.9790E 00	0.1020E 01	0.9888E 00	0.9977E 00	0.9612E 00	0.9504E 00	0.9073E 00	0.9801E 00
0.8056	0.9822E 00	0.1017E 01	0.9906E 00	0.9981E 00	0.9665E 00	0.9573E 00	0.9203E 00	0.9826E 00
0.8333	0.9856E 00	0.1014E 01	0.9924E 00	0.9985E 00	0.9720E 00	0.9645E 00	0.9340E 00	0.9851E 00
0.8611	0.9889E 00	0.1010E 01	0.9942E 00	0.9988E 00	0.9775E 00	0.9717E 00	0.9479E 00	0.9876E 00
0.8889	0.9922E 00	0.1007E 01	0.9959E 00	0.9992E 00	0.9830E 00	0.9789E 00	0.9618E 00	0.9901E 00
0.9167	0.9954E 00	0.1004E 01	0.9977E 00	0.9995E 00	0.9885E 00	0.9861E 00	0.9759E 00	0.9925E 00
0.9444	0.9971E 00	0.1003E 01	0.9986E 00	0.9997E 00	0.9925E 00	0.9910E 00	0.9845E 00	0.9950E 00
0.9722	0.9988E 00	0.1001E 01	0.9995E 00	0.9999E 00	0.9966E 00	0.9960E 00	0.9931E 00	0.9975E 00
1.0000	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	1.0000E 00	1.0000E 00

TABLE VI - CONTINUED.

(i) $M_\infty = 2.58$ STATION 8 $T_w/T_\delta = 2.086$

$\delta = 0.950$ IN $M_\delta = 2.509$ $T_\delta = 247.7$ °R $U_\delta = 1935$ FT/SEC $T_{T_\delta} = 559.5$ °R

$\rho_\delta = 0.9482 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.835$ SLUGS/FT²-SEC $P_\delta = 403.03$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2086E 01	0.	0.9237E 00	0.4409E-00	0.	0.5312E-01	0.9198E 00
0.0053	0.4487E-00	0.1611E 01	0.5696E 00	0.8940E 00	0.5712E 00	0.3254E-00	0.1171E-00	0.9202E 00
0.0105	0.5093E 00	0.1534E 01	0.6309E 00	0.9010E 00	0.6001E 00	0.3786E-00	0.1429E-00	0.9207E 00
0.0158	0.5537E 00	0.1479E 01	0.6735E 00	0.9076E 00	0.6227E 00	0.4193E-00	0.1666E-00	0.9211E 00
0.0211	0.5883E 00	0.1438E 01	0.7056E 00	0.9140E 00	0.6409E 00	0.4521E-00	0.1887E-00	0.9215E 00
0.0263	0.6133E 00	0.1410E 01	0.7285E 00	0.9201E 00	0.6537E 00	0.4761E-00	0.2067E-00	0.9219E 00
0.0316	0.6336E 00	0.1390E 01	0.7470E 00	0.9262E 00	0.6637E 00	0.4958E-00	0.2229E-00	0.9223E 00
0.0368	0.6498E 00	0.1376E 01	0.7613E 00	0.9323E 00	0.6704E 00	0.5103E 00	0.2360E-00	0.9228E 00
0.0421	0.6627E 00	0.1364E 01	0.7740E 00	0.9377E 00	0.6769E 00	0.5239E 00	0.2487E-00	0.9232E 00
0.0474	0.6737E 00	0.1354E 01	0.7840E 00	0.9419E 00	0.6822E 00	0.5348E 00	0.2594E-00	0.9236E 00
0.0526	0.6833E 00	0.1345E 01	0.7927E 00	0.9457E 00	0.6869E 00	0.5444E 00	0.2691E-00	0.9240E 00
0.0789	0.7195E 00	0.1307E 01	0.8228E 00	0.9560E 00	0.7085E 00	0.5829E 00	0.3097E-00	0.9261E 00
0.1053	0.7459E 00	0.1278E 01	0.8435E 00	0.9624E 00	0.7261E 00	0.6123E 00	0.3436E-00	0.9283E 00
0.1316	0.7682E 00	0.1253E 01	0.8602E 00	0.9672E 00	0.7423E 00	0.6384E 00	0.3755E-00	0.9304E 00
0.1579	0.7869E 00	0.1232E 01	0.8737E 00	0.9708E 00	0.7568E 00	0.6611E 00	0.4048E-00	0.9325E 00
0.1842	0.8030E 00	0.1214E 01	0.8849E 00	0.9737E 00	0.7700E 00	0.6812E 00	0.4320E-00	0.9346E 00
0.2105	0.8180E 00	0.1197E 01	0.8950E 00	0.9762E 00	0.7827E 00	0.7004E 00	0.4592E-00	0.9367E 00
0.2368	0.8334E 00	0.1179E 01	0.9051E 00	0.9786E 00	0.7961E 00	0.7205E 00	0.4887E-00	0.9388E 00
0.2632	0.8490E 00	0.1161E 01	0.9151E 00	0.9808E 00	0.8102E 00	0.7413E 00	0.5208E 00	0.9409E 00
0.2895	0.8624E 00	0.1146E 01	0.9234E 00	0.9826E 00	0.8227E 00	0.7596E 00	0.5500E 00	0.9430E 00
0.3158	0.8748E 00	0.1132E 01	0.9310E 00	0.9843E 00	0.8347E 00	0.7770E 00	0.5788E 00	0.9451E 00
0.3421	0.8858E 00	0.1120E 01	0.9376E 00	0.9857E 00	0.8457E 00	0.7928E 00	0.6056E 00	0.9472E 00
0.3684	0.8959E 00	0.1109E 01	0.9435E 00	0.9870E 00	0.8562E 00	0.8077E 00	0.6317E 00	0.9494E 00
0.3947	0.9047E 00	0.1099E 01	0.9486E 00	0.9881E 00	0.8656E 00	0.8210E 00	0.6552E 00	0.9515E 00
0.4211	0.9127E 00	0.1090E 01	0.9533E 00	0.9891E 00	0.8745E 00	0.8335E 00	0.6778E 00	0.9536E 00
0.4474	0.9207E 00	0.1082E 01	0.9578E 00	0.9901E 00	0.8834E 00	0.8459E 00	0.7008E 00	0.9557E 00
0.4737	0.9267E 00	0.1075E 01	0.9612E 00	0.9909E 00	0.8906E 00	0.8559E 00	0.7192E 00	0.9578E 00
0.5000	0.9327E 00	0.1069E 01	0.9645E 00	0.9916E 00	0.8979E 00	0.8660E 00	0.7379E 00	0.9599E 00
0.5263	0.9380E 00	0.1063E 01	0.9674E 00	0.9923E 00	0.9047E 00	0.8751E 00	0.7552E 00	0.9620E 00
0.5526	0.9422E 00	0.1059E 01	0.9697E 00	0.9928E 00	0.9104E 00	0.8828E 00	0.7693E 00	0.9641E 00
0.5789	0.9469E 00	0.1054E 01	0.9723E 00	0.9934E 00	0.9167E 00	0.8912E 00	0.7852E 00	0.9662E 00
0.6053	0.9515E 00	0.1049E 01	0.9748E 00	0.9940E 00	0.9229E 00	0.8995E 00	0.8013E 00	0.9683E 00
0.6316	0.9549E 00	0.1046E 01	0.9766E 00	0.9944E 00	0.9281E 00	0.9063E 00	0.8140E 00	0.9705E 00
0.6579	0.9589E 00	0.1042E 01	0.9788E 00	0.9949E 00	0.9338E 00	0.9139E 00	0.8286E 00	0.9726E 00
0.6842	0.9629E 00	0.1037E 01	0.9609E 00	0.9954E 00	0.9395E 00	0.9214E 00	0.8433E 00	0.9747E 00
0.7105	0.9679E 00	0.1032E 01	0.9835E 00	0.9960E 00	0.9463E 00	0.9306E 00	0.8620E 00	0.9768E 00
0.7368	0.9718E 00	0.1028E 01	0.9856E 00	0.9965E 00	0.9520E 00	0.9381E 00	0.8770E 00	0.9789E 00
0.7632	0.9756E 00	0.1024E 01	0.9876E 00	0.9970E 00	0.9577E 00	0.9457E 00	0.8922E 00	0.9810E 00
0.7895	0.9800E 00	0.1020E 01	0.9899E 00	0.9975E 00	0.9639E 00	0.9540E 00	0.9095E 00	0.9831E 00
0.8158	0.9827E 00	0.1017E 01	0.9913E 00	0.9979E 00	0.9686E 00	0.9600E 00	0.9211E 00	0.9852E 00
0.8421	0.9854E 00	0.1013E 01	0.9932E 00	0.9983E 00	0.9743E 00	0.9675E 00	0.9368E 00	0.9873E 00
0.8684	0.9902E 00	0.1010E 01	0.9951E 00	0.9988E 00	0.9800E 00	0.9750E 00	0.9525E 00	0.9894E 00
0.8947	0.9928E 00	0.1007E 01	0.9964E 00	0.9991E 00	0.9846E 00	0.9810E 00	0.9644E 00	0.9916E 00
0.9211	0.9954E 00	0.1004E 01	0.9978E 00	0.9994E 00	0.9893E 00	0.9869E 00	0.9763E 00	0.9937E 00
0.9474	0.9964E 00	0.1003E 01	0.9983E 00	0.9996E 00	0.9923E 00	0.9905E 00	0.9823E 00	0.9958E 00
0.9737	0.9984E 00	0.1001E 01	0.9993E 00	0.9998E 00	0.9964E 00	0.9957E 00	0.9923E 00	0.9979E 00
1.0000	1.0000E 00	1.0000E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	1.0000E 00

TABLE VI - CONTINUED.

(J) $M_\infty = 2.58$ STATION 10 $T_w/T_\delta = 2.082$

$\delta = 0.925$ IN $M_\delta = 2.512$ $T_\delta = 247.7$ °R $U_\delta = 1938$ FT/SEC $T_{T_\delta} = 560.3$ °R

$\rho_\delta = 0.8965 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.738$ SLUGS/FT²-SEC $P_\delta = 381.13$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2083E 01	0.	0.9208E 00	0.4240E-00	0.	0.5070E-01	0.8831E 00
0.0054	0.5091E 00	0.1526E 01	0.6288E 00	0.8954E 00	0.5791E 00	0.3641E-00	0.1366E-00	0.8837E 00
0.0108	0.5933E 00	0.1417E 01	0.7062E 00	0.9049E 00	0.6241E 00	0.4406E-00	0.1837E-00	0.8843E 00
0.0162	0.6191E 00	0.1393E 01	0.7307E 00	0.9140E 00	0.6352E 00	0.4640E-00	0.2021E-00	0.8850E 00
0.0216	0.6353E 00	0.1381E 01	0.7464E 00	0.9216E 00	0.6413E 00	0.4786E-00	0.2147E-00	0.8856E 00
0.0270	0.6483E 00	0.1374E 01	0.7597E 00	0.9295E 00	0.6452E 00	0.4900E-00	0.2255E-00	0.8862E 00
0.0324	0.6577E 00	0.1368E 01	0.7690E 00	0.9346E 00	0.6486E 00	0.4986E-00	0.2338E-00	0.8869E 00
0.0378	0.6700E 00	0.1356E 01	0.7802E 00	0.9394E 00	0.6544E 00	0.5104E 00	0.2451E-00	0.8875E 00
0.0432	0.6793E 00	0.1349E 01	0.7387E 00	0.9433E 00	0.6587E 00	0.5193E 00	0.2540E-00	0.8881E 00
0.0486	0.6877E 00	0.1341E 01	0.7962E 00	0.9467E 00	0.6628E 00	0.5276E 00	0.2624E-00	0.8888E 00
0.0541	0.6954E 00	0.1334E 01	0.8031E 00	0.9498E 00	0.6668E 00	0.5353E 00	0.2705E-00	0.8894E 00
0.0811	0.7292E 00	0.1303E 01	0.8323E 00	0.9629E 00	0.6849E 00	0.5699E 00	0.3090E-00	0.8925E 00
0.1081	0.7573E 00	0.1277E 01	0.8555E 00	0.9728E 00	0.7019E 00	0.6002E 00	0.3457E-00	0.8957E 00
0.1351	0.7792E 00	0.1255E 01	0.8730E 00	0.9804E 00	0.7161E 00	0.6249E 00	0.3779E-00	0.8989E 00
0.1622	0.7967E 00	0.1239E 01	0.8867E 00	0.9867E 00	0.7280E 00	0.6454E 00	0.4059E-00	0.9020E 00
0.1892	0.8117E 00	0.1226E 01	0.8986E 00	0.9928E 00	0.7384E 00	0.6633E 00	0.4320E-00	0.9052E 00
0.2162	0.8245E 00	0.1215E 01	0.9087E 00	0.9979E 00	0.7478E 00	0.6793E 00	0.4559E-00	0.9083E 00
0.2432	0.8397E 00	0.1200E 01	0.9198E 00	0.1003E 01	0.7596E 00	0.6984E 00	0.4855E-00	0.9115E 00
0.2703	0.8539E 00	0.1186E 01	0.9300E 00	0.1007E 01	0.7711E 00	0.7168E 00	0.5152E 00	0.9147E 00
0.2973	0.8650E 00	0.1175E 01	0.9375E 00	0.1010E 01	0.7813E 00	0.7322E 00	0.5400E 00	0.9178E 00
0.3243	0.8745E 00	0.1163E 01	0.9429E 00	0.1010E 01	0.7921E 00	0.7466E 00	0.5625E 00	0.9210E 00
0.3514	0.8852E 00	0.1149E 01	0.9485E 00	0.1010E 01	0.8047E 00	0.7631E 00	0.5886E 00	0.9241E 00
0.3784	0.8954E 00	0.1134E 01	0.9533E 00	0.1008E 01	0.8181E 00	0.7796E 00	0.6149E 00	0.9273E 00
0.4054	0.9040E 00	0.1120E 01	0.9566E 00	0.1006E 01	0.8308E 00	0.7943E 00	0.6381E 00	0.9305E 00
0.4324	0.9135E 00	0.1106E 01	0.9603E 00	0.1003E 01	0.8447E 00	0.8109E 00	0.6646E 00	0.9336E 00
0.4595	0.9222E 00	0.1092E 01	0.9634E 00	0.1001E 01	0.8582E 00	0.8265E 00	0.6900E 00	0.9368E 00
0.4865	0.9295E 00	0.1081E 01	0.9662E 00	0.9989E 00	0.8697E 00	0.8400E 00	0.7125E 00	0.9400E 00
0.5135	0.9341E 00	0.1074E 01	0.9677E 00	0.9973E 00	0.8787E 00	0.8500E 00	0.7280E 00	0.9431E 00
0.5405	0.9400E 00	0.1066E 01	0.9702E 00	0.9964E 00	0.8882E 00	0.8614E 00	0.7475E 00	0.9463E 00
0.5676	0.9458E 00	0.1058E 01	0.9727E 00	0.9960E 00	0.8973E 00	0.8726E 00	0.7672E 00	0.9494E 00
0.5946	0.9515E 00	0.1051E 01	0.9753E 00	0.9956E 00	0.9064E 00	0.8837E 00	0.7871E 00	0.9526E 00
0.6216	0.9559E 00	0.1046E 01	0.9775E 00	0.9954E 00	0.9141E 00	0.8931E 00	0.8035E 00	0.9558E 00
0.6486	0.9596E 00	0.1041E 01	0.9790E 00	0.9953E 00	0.9212E 00	0.9015E 00	0.8181E 00	0.9589E 00
0.6757	0.9634E 00	0.1037E 01	0.9810E 00	0.9957E 00	0.9276E 00	0.9097E 00	0.8329E 00	0.9621E 00
0.7027	0.9670E 00	0.1034E 01	0.9829E 00	0.9962E 00	0.9341E 00	0.9178E 00	0.8478E 00	0.9652E 00
0.7297	0.9707E 00	0.1030E 01	0.9849E 00	0.9967E 00	0.9405E 00	0.9260E 00	0.8628E 00	0.9684E 00
0.7568	0.9743E 00	0.1026E 01	0.9868E 00	0.9971E 00	0.9470E 00	0.9341E 00	0.8779E 00	0.9716E 00
0.7838	0.9779E 00	0.1023E 01	0.9886E 00	0.9976E 00	0.9534E 00	0.9423E 00	0.8932E 00	0.9747E 00
0.8108	0.9820E 00	0.1018E 01	0.9907E 00	0.9981E 00	0.9604E 00	0.9512E 00	0.9106E 00	0.9779E 00
0.8378	0.9855E 00	0.1015E 01	0.9926E 00	0.9985E 00	0.9669E 00	0.9594E 00	0.9261E 00	0.9810E 00
0.8649	0.9889E 00	0.1011E 01	0.9943E 00	0.9989E 00	0.9733E 00	0.9675E 00	0.9418E 00	0.9842E 00
0.8919	0.9918E 00	0.1008E 01	0.9958E 00	0.9993E 00	0.9792E 00	0.9748E 00	0.9554E 00	0.9874E 00
0.9189	0.9941E 00	0.1006E 01	0.9970E 00	0.9996E 00	0.9846E 00	0.9812E 00	0.9670E 00	0.9905E 00
0.9459	0.9965E 00	0.1004E 01	0.9982E 00	0.9999E 00	0.9901E 00	0.9880E 00	0.9795E 00	0.9937E 00
0.9730	0.9991E 00	0.1001E 01	0.9995E 00	0.1000E 01	0.9958E 00	0.9950E 00	0.9925E 00	0.9968E 00
1.0000	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.9998E 00	1.0000E 00	0.1000E 01

TABLE VI - CONTINUED.

(k) $M_\infty = 2.58$ STATION 12 $T_w/T_\delta = 2.128$

$\delta = 1.025$ IN $M_\delta = 2.553$ $T_\delta = 242.8$ °R $U_\delta = 1950$ FT/SEC $T_{T_\delta} = 559.3$ °R

$\rho_\delta = 0.8434 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.644$ SLUGS/FT²-SEC $P_\delta = 351.38$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2128E 01	0.	0.9240E 00	0.4121E-00	0.	0.4729E-01	0.8772E 00
0.0049	0.4191E-00	0.1660E 01	0.5399E 00	0.8858E 00	0.5287E 00	0.2855E-00	0.9732E-01	0.8779E 00
0.0098	0.4920E-00	0.1558E 01	0.6140E 00	0.8897E 00	0.5638E 00	0.3463E-00	0.1236E-00	0.8784E 00
0.0146	0.5305E 00	0.1508E 01	0.6515E 00	0.8950E 00	0.5827E 00	0.3798E-00	0.1414E-00	0.8790E 00
0.0195	0.5612E 00	0.1470E 01	0.6804E 00	0.9002E 00	0.5983E 00	0.4072E-00	0.1580E-00	0.8796E 00
0.0244	0.5861E 00	0.1440E 01	0.7033E 00	0.9052E 00	0.6111E 00	0.4299E-00	0.1732E-00	0.8802E 00
0.0293	0.6049E 00	0.1419E 01	0.7202E 00	0.9096E 00	0.6207E 00	0.4472E-00	0.1858E-00	0.8808E 00
0.0341	0.6215E 00	0.1401E 01	0.7356E 00	0.9147E 00	0.6289E 00	0.4628E-00	0.1980E-00	0.8814E 00
0.0390	0.6356E 00	0.1387E 01	0.7484E 00	0.9192E 00	0.6359E 00	0.4761E-00	0.2089E-00	0.8820E 00
0.0439	0.6472E 00	0.1375E 01	0.7588E 00	0.9229E 00	0.6418E 00	0.4872E-00	0.2185E-00	0.8826E 00
0.0488	0.6574E 00	0.1365E 01	0.7680E 00	0.9266E 00	0.6469E 00	0.4970E-00	0.2274E-00	0.8832E 00
0.0732	0.6997E 00	0.1325E 01	0.8052E 00	0.9423E 00	0.6688E 00	0.5387E 00	0.2687E-00	0.8861E 00
0.0976	0.7317E 00	0.1292E 01	0.8315E 00	0.9523E 00	0.6882E 00	0.5725E 00	0.3057E-00	0.8891E 00
0.1220	0.7590E 00	0.1263E 01	0.8530E 00	0.9604E 00	0.7061E 00	0.6025E 00	0.3416E-00	0.8921E 00
0.1463	0.7808E 00	0.1241E 01	0.8697E 00	0.9669E 00	0.7213E 00	0.6275E 00	0.3737E-00	0.8951E 00
0.1707	0.7986E 00	0.1222E 01	0.8828E 00	0.9719E 00	0.7347E 00	0.6488E 00	0.4023E-00	0.8981E 00
0.1951	0.8145E 00	0.1205E 01	0.8941E 00	0.9758E 00	0.7476E 00	0.6687E 00	0.4301E-00	0.9011E 00
0.2195	0.8267E 00	0.1191E 01	0.9022E 00	0.9780E 00	0.7588E 00	0.6849E 00	0.4530E-00	0.9041E 00
0.2439	0.8397E 00	0.1176E 01	0.9104E 00	0.9797E 00	0.7713E 00	0.7025E 00	0.4787E-00	0.9071E 00
0.2683	0.8523E 00	0.1161E 01	0.9183E 00	0.9814E 00	0.7838E 00	0.7200E 00	0.5052E 00	0.9101E 00
0.2927	0.8618E 00	0.1150E 01	0.9241E 00	0.9826E 00	0.7940E 00	0.7340E 00	0.5265E 00	0.9131E 00
0.3171	0.8709E 00	0.1140E 01	0.9295E 00	0.9838E 00	0.8039E 00	0.7475E 00	0.5477E 00	0.9161E 00
0.3415	0.8811E 00	0.1128E 01	0.9355E 00	0.9851E 00	0.8149E 00	0.7626E 00	0.5722E 00	0.9191E 00
0.3659	0.8908E 00	0.1117E 01	0.9412E 00	0.9863E 00	0.8256E 00	0.7774E 00	0.5968E 00	0.9221E 00
0.3902	0.8989E 00	0.1108E 01	0.9459E 00	0.9874E 00	0.8351E 00	0.7903E 00	0.6186E 00	0.9251E 00
0.4146	0.9049E 00	0.1101E 01	0.9493E 00	0.9881E 00	0.8429E 00	0.8005E 00	0.6356E 00	0.9281E 00
0.4390	0.9119E 00	0.1093E 01	0.9533E 00	0.9890E 00	0.8517E 00	0.8122E 00	0.6557E 00	0.9311E 00
0.4634	0.9173E 00	0.1087E 01	0.9563E 00	0.9897E 00	0.8591E 00	0.8219E 00	0.6722E 00	0.9341E 00
0.4878	0.9238E 00	0.1080E 01	0.9599E 00	0.9905E 00	0.8675E 00	0.8331E 00	0.6919E 00	0.9371E 00
0.5122	0.9284E 00	0.1075E 01	0.9625E 00	0.9911E 00	0.8744E 00	0.8419E 00	0.7071E 00	0.9401E 00
0.5366	0.9337E 00	0.1069E 01	0.9654E 00	0.9918E 00	0.8819E 00	0.8517E 00	0.7246E 00	0.9431E 00
0.5610	0.9373E 00	0.1065E 01	0.9674E 00	0.9922E 00	0.8880E 00	0.8593E 00	0.7374E 00	0.9461E 00
0.5854	0.9428E 00	0.1060E 01	0.9703E 00	0.9929E 00	0.8958E 00	0.8695E 00	0.7562E 00	0.9491E 00
0.6098	0.9457E 00	0.1056E 01	0.9719E 00	0.9933E 00	0.9012E 00	0.8762E 00	0.7673E 00	0.9521E 00
0.6341	0.9526E 00	0.1049E 01	0.9755E 00	0.9941E 00	0.9104E 00	0.8885E 00	0.7912E 00	0.9551E 00
0.6585	0.9554E 00	0.1046E 01	0.9770E 00	0.9945E 00	0.9158E 00	0.8951E 00	0.8026E 00	0.9581E 00
0.6829	0.9586E 00	0.1043E 01	0.9787E 00	0.9949E 00	0.9216E 00	0.9023E 00	0.8153E 00	0.9611E 00
0.7073	0.9615E 00	0.1040E 01	0.9802E 00	0.9953E 00	0.9272E 00	0.9092E 00	0.8272E 00	0.9641E 00
0.7317	0.9647E 00	0.1036E 01	0.9819E 00	0.9957E 00	0.9331E 00	0.9166E 00	0.8405E 00	0.9671E 00
0.7561	0.9682E 00	0.1033E 01	0.9837E 00	0.9961E 00	0.9394E 00	0.9244E 00	0.8551E 00	0.9701E 00
0.7805	0.9710E 00	0.1030E 01	0.9852E 00	0.9965E 00	0.9449E 00	0.9313E 00	0.8673E 00	0.9731E 00
0.8049	0.9751E 00	0.1025E 01	0.9873E 00	0.9970E 00	0.9518E 00	0.9400E 00	0.8843E 00	0.9760E 00
0.8293	0.9793E 00	0.1021E 01	0.9894E 00	0.9975E 00	0.9587E 00	0.9490E 00	0.9018E 00	0.9790E 00
0.8537	0.9813E 00	0.1019E 01	0.9904E 00	0.9977E 00	0.9636E 00	0.9547E 00	0.9117E 00	0.9820E 00
0.8780	0.9853E 00	0.1015E 01	0.9925E 00	0.9982E 00	0.9704E 00	0.9635E 00	0.9291E 00	0.9850E 00
0.9024	0.9880E 00	0.1012E 01	0.9939E 00	0.9986E 00	0.9761E 00	0.9705E 00	0.9422E 00	0.9880E 00
0.9268	0.9924E 00	0.1008E 01	0.9960E 00	0.9991E 00	0.9834E 00	0.9799E 00	0.9616E 00	0.9910E 00
0.9512	0.9951E 00	0.1005E 01	0.9974E 00	0.9994E 00	0.9891E 00	0.9869E 00	0.9749E 00	0.9940E 00
0.9756	0.9972E 00	0.1003E 01	0.9985E 00	0.9997E 00	0.9942E 00	0.9930E 00	0.9861E 00	0.9970E 00
1.0000	0.1000E 01	0.1000E 01	0.9998E 00	0.1000E 01	1.0000E 00	0.1000E 01	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(1) $M_\infty = 2.58$ STATION 14 $T_w/T_\delta = 2.184$

$\delta = 1.000$ IN $M_\delta = 2.611$ $T_\delta = 236.8$ °R $U_\delta = 1969$ FT/SEC $T_{T_\delta} = 559.6$ °R

$\rho_\delta = 0.7690 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.541$ SLUGS/FT²-SEC $P_\delta = 312.45$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2184E 01	0.	0.9242E 00	0.4469E-00	0.	0.4810E-01	0.9761E 00
0.0050	0.4482E-00	0.1735E 01	0.5905E 00	0.9355E 00	0.5624E 00	0.3263E-00	0.1122E-00	0.9761E 00
0.0100	0.5199E 00	0.1623E 01	0.6625E 00	0.9401E 00	0.6012E 00	0.3914E-00	0.1442E-00	0.9761E 00
0.0150	0.5455E 00	0.1588E 01	0.6875E 00	0.9448E 00	0.6145E 00	0.4151E-00	0.1584E-00	0.9761E 00
0.0200	0.5647E 00	0.1565E 01	0.7066E 00	0.9503E 00	0.6236E 00	0.4330E-00	0.1702E-00	0.9761E 00
0.0250	0.5820E 00	0.1544E 01	0.7231E 00	0.9549E 00	0.6323E 00	0.4493E-00	0.1816E-00	0.9761E 00
0.0300	0.5964E 00	0.1525E 01	0.7366E 00	0.9584E 00	0.6400E 00	0.4632E-00	0.1919E-00	0.9761E 00
0.0350	0.6096E 00	0.1508E 01	0.7486E 00	0.9614E 00	0.6473E 00	0.4761E-00	0.2019E-00	0.9761E 00
0.0400	0.6214E 00	0.1493E 01	0.7592E 00	0.9641E 00	0.6540E 00	0.4878E-00	0.2113E-00	0.9761E 00
0.0450	0.6319E 00	0.1479E 01	0.7684E 00	0.9664E 00	0.6601E 00	0.4984E-00	0.2201E-00	0.9761E 00
0.0500	0.6412E 00	0.1466E 01	0.7765E 00	0.9683E 00	0.6657E 00	0.5079E 00	0.2283E-00	0.9761E 00
0.0750	0.6828E 00	0.1411E 01	0.8110E 00	0.9765E 00	0.6918E 00	0.5513E 00	0.2691E-00	0.9761E 00
0.1000	0.7137E 00	0.1369E 01	0.8351E 00	0.9816E 00	0.7130E 00	0.5851E 00	0.3046E-00	0.9761E 00
0.1250	0.7409E 00	0.1332E 01	0.8550E 00	0.9852E 00	0.7330E 00	0.6158E 00	0.3399E-00	0.9761E 00
0.1500	0.7643E 00	0.1299E 01	0.8712E 00	0.9876E 00	0.7513E 00	0.6432E 00	0.3738E-00	0.9761E 00
0.1750	0.7858E 00	0.1270E 01	0.8855E 00	0.9895E 00	0.7688E 00	0.6689E 00	0.4078E-00	0.9761E 00
0.2000	0.8024E 00	0.1247E 01	0.8960E 00	0.9906E 00	0.7829E 00	0.6892E 00	0.4364E-00	0.9761E 00
0.2250	0.8183E 00	0.1225E 01	0.9056E 00	0.9913E 00	0.7971E 00	0.7093E 00	0.4657E-00	0.9761E 00
0.2500	0.8328E 00	0.1205E 01	0.9141E 00	0.9918E 00	0.8102E 00	0.7277E 00	0.4940E-00	0.9761E 00
0.2750	0.8456E 00	0.1187E 01	0.9216E 00	0.9924E 00	0.8220E 00	0.7443E 00	0.5207E 00	0.9761E 00
0.3000	0.8572E 00	0.1172E 01	0.9281E 00	0.9928E 00	0.8328E 00	0.7595E 00	0.5459E 00	0.9761E 00
0.3250	0.8679E 00	0.1158E 01	0.9341E 00	0.9934E 00	0.8428E 00	0.7735E 00	0.5703E 00	0.9761E 00
0.3500	0.8777E 00	0.1145E 01	0.9395E 00	0.9938E 00	0.8522E 00	0.7866E 00	0.5937E 00	0.9761E 00
0.3750	0.8872E 00	0.1133E 01	0.9446E 00	0.9944E 00	0.8612E 00	0.7993E 00	0.6171E 00	0.9761E 00
0.4000	0.8958E 00	0.1123E 01	0.9491E 00	0.9947E 00	0.8695E 00	0.8109E 00	0.6390E 00	0.9761E 00
0.4250	0.9033E 00	0.1113E 01	0.9530E 00	0.9949E 00	0.8770E 00	0.8213E 00	0.6590E 00	0.9761E 00
0.4500	0.9107E 00	0.1103E 01	0.9568E 00	0.9950E 00	0.8845E 00	0.8316E 00	0.6793E 00	0.9761E 00
0.4750	0.9169E 00	0.1096E 01	0.9599E 00	0.9952E 00	0.8907E 00	0.8401E 00	0.6967E 00	0.9761E 00
0.5000	0.9241E 00	0.1087E 01	0.9636E 00	0.9956E 00	0.8979E 00	0.8502E 00	0.7174E 00	0.9761E 00
0.5250	0.9314E 00	0.1078E 01	0.9672E 00	0.9958E 00	0.9053E 00	0.8604E 00	0.7390E 00	0.9761E 00
0.5500	0.9373E 00	0.1071E 01	0.9701E 00	0.9960E 00	0.9114E 00	0.8687E 00	0.7570E 00	0.9761E 00
0.5750	0.9425E 00	0.1064E 01	0.9725E 00	0.9960E 00	0.9169E 00	0.8762E 00	0.7733E 00	0.9761E 00
0.6000	0.9471E 00	0.1059E 01	0.9746E 00	0.9960E 00	0.9218E 00	0.8828E 00	0.7877E 00	0.9761E 00
0.6250	0.9519E 00	0.1053E 01	0.9769E 00	0.9962E 00	0.9268E 00	0.8896E 00	0.8032E 00	0.9761E 00
0.6500	0.9555E 00	0.1049E 01	0.9787E 00	0.9964E 00	0.9305E 00	0.8948E 00	0.8150E 00	0.9761E 00
0.6750	0.9600E 00	0.1044E 01	0.9808E 00	0.9966E 00	0.9352E 00	0.9012E 00	0.8300E 00	0.9761E 00
0.7000	0.9635E 00	0.1040E 01	0.9825E 00	0.9968E 00	0.9388E 00	0.9064E 00	0.8422E 00	0.9761E 00
0.7250	0.9679E 00	0.1035E 01	0.9847E 00	0.9972E 00	0.9443E 00	0.9137E 00	0.8582E 00	0.9772E 00
0.7500	0.9721E 00	0.1030E 01	0.9867E 00	0.9975E 00	0.9497E 00	0.9208E 00	0.8741E 00	0.9783E 00
0.7750	0.9754E 00	0.1026E 01	0.9882E 00	0.9977E 00	0.9552E 00	0.9276E 00	0.8876E 00	0.9805E 00
0.8000	0.9791E 00	0.1022E 01	0.9900E 00	0.9979E 00	0.9613E 00	0.9351E 00	0.9031E 00	0.9826E 00
0.8250	0.9827E 00	0.1018E 01	0.9917E 00	0.9982E 00	0.9671E 00	0.9424E 00	0.9183E 00	0.9848E 00
0.8500	0.9872E 00	0.1013E 01	0.9939E 00	0.9986E 00	0.9739E 00	0.9511E 00	0.9373E 00	0.9870E 00
0.8750	0.9896E 00	0.1011E 01	0.9950E 00	0.9989E 00	0.9785E 00	0.9567E 00	0.9486E 00	0.9892E 00
0.9000	0.9915E 00	0.1009E 01	0.9960E 00	0.9991E 00	0.9826E 00	0.9616E 00	0.9580E 00	0.9913E 00
0.9250	0.9946E 00	0.1005E 01	0.9975E 00	0.9994E 00	0.9880E 00	0.9683E 00	0.9723E 00	0.9935E 00
0.9500	0.9966E 00	0.1003E 01	0.9984E 00	0.9997E 00	0.9922E 00	0.9734E 00	0.9823E 00	0.9957E 00
0.9750	0.9988E 00	0.1001E 01	0.9994E 00	0.9999E 00	0.9965E 00	0.9786E 00	0.9928E 00	0.9978E 00
1.0000	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.9826E 00	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(m) $M_\infty = 2.58$ STATION 18 $T_w/T_\delta = 2.212$

$\delta = 1.100$ IN $M_\delta = 2.635$ $T_\delta = 235.4$ °R $U_\delta = 1982$ FT/SEC $T_{T_\delta} = 562.4$ °R

$\rho_\delta = 0.7881 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.562$ SLUGS/FT²-SEC $P_\delta = 318.38$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2212E 01	0.	0.9260E 00	0.4521E-00	0.	0.4745E-01	0.1000E 01
0.0045	0.3985E-00	0.1734E 01	0.5247E 00	0.8860E 00	0.5767E 00	0.3025E-00	0.9528E-01	0.1000E 01
0.0091	0.4513E-00	0.1661E 01	0.5816E 00	0.8921E 00	0.6020E 00	0.3501E-00	0.1134E-00	0.1000E 01
0.0136	0.4911E-00	0.1605E 01	0.6221E 00	0.8971E 00	0.6230E 00	0.3876E-00	0.1304E-00	0.1000E 01
0.0182	0.5191E 00	0.1572E 01	0.6507E 00	0.9042E 00	0.6362E 00	0.4140E-00	0.1443E-00	0.1000E 01
0.0227	0.5391E 00	0.1547E 01	0.6704E 00	0.9090E 00	0.6463E 00	0.4333E-00	0.1554E-00	0.1000E 01
0.0273	0.5548E 00	0.1528E 01	0.6857E 00	0.9132E 00	0.6543E 00	0.4467E-00	0.1648E-00	0.1000E 01
0.0318	0.5682E 00	0.1512E 01	0.6984E 00	0.9166E 00	0.6614E 00	0.4620E-00	0.1734E-00	0.1000E 01
0.0364	0.5795E 00	0.1498E 01	0.7091E 00	0.9196E 00	0.6675E 00	0.4734E-00	0.1811E-00	0.1000E 01
0.0409	0.5899E 00	0.1486E 01	0.7188E 00	0.9224E 00	0.6731E 00	0.4838E-00	0.1885E-00	0.1000E 01
0.0455	0.5992E 00	0.1475E 01	0.7275E 00	0.9251E 00	0.6782E 00	0.4934E-00	0.1955E-00	0.1000E 01
0.0682	0.6378E 00	0.1429E 01	0.7621E 00	0.9358E 00	0.7001E 00	0.5335E 00	0.2275E-00	0.1000E 01
0.0909	0.6720E 00	0.1387E 01	0.7912E 00	0.9448E 00	0.7209E 00	0.5704E 00	0.2607E-00	0.1000E 01
0.1136	0.7011E 00	0.1352E 01	0.8149E 00	0.9521E 00	0.7397E 00	0.6028E 00	0.2931E-00	0.1000E 01
0.1364	0.7257E 00	0.1324E 01	0.8347E 00	0.9592E 00	0.7557E 00	0.6307E 00	0.3240E-00	0.1000E 01
0.1591	0.7480E 00	0.1297E 01	0.8517E 00	0.9649E 00	0.7709E 00	0.6566E 00	0.3549E-00	0.1000E 01
0.1818	0.7675E 00	0.1275E 01	0.8662E 00	0.9699E 00	0.7846E 00	0.6797E 00	0.3843E-00	0.1000E 01
0.2045	0.7839E 00	0.1255E 01	0.8780E 00	0.9738E 00	0.7967E 00	0.6995E 00	0.4112E-00	0.1000E 01
0.2273	0.7994E 00	0.1236E 01	0.8885E 00	0.9765E 00	0.8091E 00	0.7189E 00	0.4383E-00	0.1000E 01
0.2500	0.8133E 00	0.1219E 01	0.8976E 00	0.9788E 00	0.8206E 00	0.7366E 00	0.4642E-00	0.1000E 01
0.2727	0.8260E 00	0.1203E 01	0.9057E 00	0.9805E 00	0.8315E 00	0.7530E 00	0.4891E-00	0.1000E 01
0.2955	0.8380E 00	0.1188E 01	0.9130E 00	0.9820E 00	0.8420E 00	0.7687E 00	0.5138E 00	0.1000E 01
0.3182	0.8484E 00	0.1175E 01	0.9193E 00	0.9832E 00	0.8513E 00	0.7825E 00	0.5363E 00	0.1000E 01
0.3409	0.8571E 00	0.1164E 01	0.9245E 00	0.9843E 00	0.8592E 00	0.7943E 00	0.5560E 00	0.1000E 01
0.3636	0.8667E 00	0.1152E 01	0.9301E 00	0.9854E 00	0.8680E 00	0.8073E 00	0.5785E 00	0.1000E 01
0.3864	0.8755E 00	0.1142E 01	0.9351E 00	0.9864E 00	0.8760E 00	0.8192E 00	0.5997E 00	0.1000E 01
0.4091	0.8841E 00	0.1131E 01	0.9400E 00	0.9874E 00	0.8841E 00	0.8311E 00	0.6214E 00	0.1000E 01
0.4318	0.8913E 00	0.1123E 01	0.9441E 00	0.9883E 00	0.8909E 00	0.8411E 00	0.6402E 00	0.1000E 01
0.4545	0.8972E 00	0.1116E 01	0.9474E 00	0.9889E 00	0.8965E 00	0.8493E 00	0.6559E 00	0.1000E 01
0.4773	0.9037E 00	0.1108E 01	0.9509E 00	0.9897E 00	0.9027E 00	0.8584E 00	0.6736E 00	0.1000E 01
0.5000	0.9088E 00	0.1102E 01	0.9537E 00	0.9903E 00	0.9076E 00	0.8656E 00	0.6880E 00	0.1000E 01
0.5227	0.9140E 00	0.1096E 01	0.9565E 00	0.9908E 00	0.9126E 00	0.8729E 00	0.7027E 00	0.1000E 01
0.5455	0.9184E 00	0.1091E 01	0.9589E 00	0.9913E 00	0.9169E 00	0.8792E 00	0.7157E 00	0.1000E 01
0.5682	0.9226E 00	0.1086E 01	0.9611E 00	0.9918E 00	0.9210E 00	0.8852E 00	0.7281E 00	0.1000E 01
0.5909	0.9274E 00	0.1080E 01	0.9637E 00	0.9923E 00	0.9257E 00	0.8920E 00	0.7426E 00	0.1000E 01
0.6136	0.9313E 00	0.1076E 01	0.9657E 00	0.9928E 00	0.9295E 00	0.8976E 00	0.7545E 00	0.1000E 01
0.6364	0.9354E 00	0.1071E 01	0.9679E 00	0.9932E 00	0.9336E 00	0.9036E 00	0.7674E 00	0.1000E 01
0.6591	0.9395E 00	0.1067E 01	0.9700E 00	0.9937E 00	0.9377E 00	0.9095E 00	0.7805E 00	0.1000E 01
0.6818	0.9436E 00	0.1062E 01	0.9721E 00	0.9941E 00	0.9417E 00	0.9155E 00	0.7937E 00	0.1000E 01
0.7045	0.9478E 00	0.1057E 01	0.9742E 00	0.9946E 00	0.9460E 00	0.9216E 00	0.8074E 00	0.1000E 01
0.7273	0.9519E 00	0.1053E 01	0.9763E 00	0.9950E 00	0.9500E 00	0.9275E 00	0.8210E 00	0.1000E 01
0.7500	0.9564E 00	0.1048E 01	0.9786E 00	0.9955E 00	0.9546E 00	0.9342E 00	0.8363E 00	0.1000E 01
0.7727	0.9610E 00	0.1043E 01	0.9809E 00	0.9960E 00	0.9593E 00	0.9410E 00	0.8523E 00	0.1000E 01
0.7955	0.9657E 00	0.1037E 01	0.9833E 00	0.9965E 00	0.9641E 00	0.9480E 00	0.8689E 00	0.1000E 01
0.8182	0.9709E 00	0.1032E 01	0.9858E 00	0.9970E 00	0.9694E 00	0.9557E 00	0.8875E 00	0.1000E 01
0.8409	0.9759E 00	0.1026E 01	0.9883E 00	0.9976E 00	0.9746E 00	0.9632E 00	0.9059E 00	0.1000E 01
0.8636	0.9805E 00	0.1021E 01	0.9905E 00	0.9980E 00	0.9793E 00	0.9700E 00	0.9229E 00	0.1000E 01
0.8864	0.9848E 00	0.1016E 01	0.9926E 00	0.9985E 00	0.9839E 00	0.9767E 00	0.9395E 00	0.1000E 01
0.9091	0.9883E 00	0.1013E 01	0.9943E 00	0.9988E 00	0.9875E 00	0.9818E 00	0.9528E 00	0.1000E 01
0.9318	0.9923E 00	0.1008E 01	0.9962E 00	0.9993E 00	0.9917E 00	0.9879E 00	0.9684E 00	0.1000E 01
0.9545	0.9952E 00	0.1005E 01	0.9976E 00	0.9996E 00	0.9948E 00	0.9924E 00	0.9801E 00	0.1000E 01
0.9773	0.9981E 00	0.1002E 01	0.9989E 00	0.9999E 00	0.9979E 00	0.9968E 00	0.9918E 00	0.1000E 01
1.0000	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	1.0000E 00	0.9999E 00	0.9999E 00	0.1000E 01

TABLE VI - CONTINUED.

(n) M_∞ = 3.30 STATION 8 T_w/T_δ = 2.853

δ = 0.650 IN M_δ = 3.276 T_δ = 184.0 °R U_δ = 2178 FT/SEC T_{T_δ} = 579.2 °R

ρ_δ = 0.5614 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 1.223 SLUGS/FT²-SEC P_δ = 177.30 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2854E 01	0.	0.9066E 00	0.3154E-00	0.	0.1629E-01	0.8999E 00
0.0077	0.4300E-00	0.1917E 01	0.5953E 00	0.8507E 00	0.4700E-00	0.2797E-00	0.5250E-01	0.9007E 00
0.0154	0.4955E-00	0.1784E 01	0.6618E 00	0.8655E 00	0.5054E 00	0.3344E-00	0.7175E-01	0.9015E 00
0.0231	0.5353E 00	0.1714E 01	0.7007E 00	0.8793E 00	0.5266E 00	0.3689E-00	0.8739E-01	0.9022E 00
0.0308	0.5631E 00	0.1670E 01	0.7277E 00	0.8917E 00	0.5408E 00	0.3934E-00	0.1005E-00	0.9030E 00
0.0385	0.5814E 00	0.1649E 01	0.7465E 00	0.9038E 00	0.5483E 00	0.4092E-00	0.1103E-00	0.9038E 00
0.0462	0.5941E 00	0.1634E 01	0.7594E 00	0.9122E 00	0.5539E 00	0.4205E-00	0.1178E-00	0.9046E 00
0.0538	0.6047E 00	0.1621E 01	0.7699E 00	0.9192E 00	0.5586E 00	0.4299E-00	0.1244E-00	0.9053E 00
0.0615	0.6147E 00	0.1607E 01	0.7791E 00	0.9244E 00	0.5641E 00	0.4394E-00	0.1311E-00	0.9061E 00
0.0692	0.6235E 00	0.1595E 01	0.7873E 00	0.9293E 00	0.5688E 00	0.4477E-00	0.1372E-00	0.9069E 00
0.0769	0.6313E 00	0.1585E 01	0.7947E 00	0.9341E 00	0.5729E 00	0.4552E-00	0.1429E-00	0.9076E 00
0.1154	0.6607E 00	0.1542E 01	0.8205E 00	0.9490E 00	0.5912E 00	0.4850E-00	0.1669E-00	0.9115E 00
0.1538	0.6830E 00	0.1504E 01	0.8375E 00	0.9560E 00	0.6089E 00	0.5098E 00	0.1878E-00	0.9153E 00
0.1923	0.7008E 00	0.1472E 01	0.8502E 00	0.9604E 00	0.6247E 00	0.5310E 00	0.2067E-00	0.9192E 00
0.2308	0.7153E 00	0.1446E 01	0.8599E 00	0.9635E 00	0.6387E 00	0.5491E 00	0.2235E-00	0.9230E 00
0.2692	0.7280E 00	0.1422E 01	0.8680E 00	0.9655E 00	0.6520E 00	0.5658E 00	0.2395E-00	0.9269E 00
0.3077	0.7408E 00	0.1398E 01	0.8759E 00	0.9674E 00	0.6658E 00	0.5830E 00	0.2567E-00	0.9307E 00
0.3462	0.7541E 00	0.1374E 01	0.8840E 00	0.9694E 00	0.6803E 00	0.6012E 00	0.2759E-00	0.9346E 00
0.3846	0.7690E 00	0.1348E 01	0.8927E 00	0.9716E 00	0.6965E 00	0.6216E 00	0.2990E-00	0.9384E 00
0.4231	0.7848E 00	0.1320E 01	0.9017E 00	0.9738E 00	0.7139E 00	0.6436E 00	0.3253E-00	0.9423E 00
0.4615	0.8025E 00	0.1290E 01	0.9114E 00	0.9763E 00	0.7336E 00	0.6685E 00	0.3573E-00	0.9461E 00
0.5000	0.8217E 00	0.1258E 01	0.9216E 00	0.9789E 00	0.7553E 00	0.6960E 00	0.3953E-00	0.9500E 00
0.5385	0.8445E 00	0.1221E 01	0.9332E 00	0.9819E 00	0.7813E 00	0.7289E 00	0.4452E-00	0.9538E 00
0.5769	0.8677E 00	0.1185E 01	0.9445E 00	0.9848E 00	0.8084E 00	0.7633E 00	0.5017E 00	0.9577E 00
0.6154	0.8895E 00	0.1152E 01	0.9546E 00	0.9874E 00	0.8349E 00	0.7968E 00	0.5614E 00	0.9615E 00
0.6538	0.9115E 00	0.1120E 01	0.9644E 00	0.9900E 00	0.8624E 00	0.8315E 00	0.6283E 00	0.9654E 00
0.6923	0.9328E 00	0.1085E 01	0.9736E 00	0.9925E 00	0.8899E 00	0.8661E 00	0.7003E 00	0.9692E 00
0.7308	0.9509E 00	0.1064E 01	0.9810E 00	0.9945E 00	0.9144E 00	0.8969E 00	0.7682E 00	0.9731E 00
0.7692	0.9670E 00	0.1043E 01	0.9875E 00	0.9962E 00	0.9370E 00	0.9251E 00	0.8337E 00	0.9769E 00
0.8077	0.9795E 00	0.1026E 01	0.9923E 00	0.9976E 00	0.9558E 00	0.9482E 00	0.8890E 00	0.9808E 00
0.8462	0.9910E 00	0.1012E 01	0.9967E 00	0.9988E 00	0.9736E 00	0.9701E 00	0.9431E 00	0.9846E 00
0.8846	0.9960E 00	0.1005E 01	0.9986E 00	0.9994E 00	0.9836E 00	0.9820E 00	0.9698E 00	0.9885E 00
0.9231	0.9984E 00	0.1002E 01	0.9995E 00	0.9997E 00	0.9903E 00	0.9896E 00	0.9846E 00	0.9923E 00
0.9615	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.9962E 00	0.9961E 00	0.9964E 00	0.9962E 00
1.0000	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	1.0000E 00	0.1000E 01	1.0000E 00

TABLE VI - CONTINUED.

(o) M_∞ = 3.30 STATION 10 T_w/T_δ = 2.906

δ = 0.650 IN M_δ = 3.299 T_δ = 179.9 °R U_δ = 2169 FT/SEC T_{T_δ} = 571.5 °R

ρ_δ = 0.4999 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 1.084 SLUGS/FT²-SEC P_δ = 154.32 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2906E 01	0.	[illegible] 00	0.2964E-00	0.	0.1508E-01	0.8614E 00
0.0077	0.4288E-00	0.1955E 01	0.[illegible] 00	[illegible] 00	0.4412E-00	0.2645E-00	0.4903E-01	0.8625E 00
0.0154	0.5544E 00	0.1658E 01	0.[illegible] 00	[illegible] 00	0.5209E 00	0.3719E-00	0.9077E-01	0.8635E 00
0.0231	0.5895E 00	0.1591E 01	0.[illegible] 00	0.8798E 00	0.5434E 00	0.4041E-00	0.1087E-00	0.8646E 00
0.0308	0.6077E 00	0.1564E 01	0.7599E 00	0.8882E 00	0.5535E 00	0.4207E-00	0.1194E-00	0.8657E 00
0.0385	0.6215E 00	0.1543E 01	0.7718E 00	0.8939E 00	0.5618E 00	0.4337E-00	0.1283E-00	0.8667E 00
0.0462	0.6317E 00	0.1537E 01	0.7830E 00	0.9040E 00	0.5646E 00	0.4422E-00	0.1354E-00	0.8678E 00
0.0538	0.6401E 00	0.1532E 01	0.7923E 00	0.9126E 00	0.5670E 00	0.4493E-00	0.1416E-00	0.8689E 00
0.0615	0.6487E 00	0.1526E 01	0.8014E 00	0.9206E 00	0.5700E 00	0.4569E-00	0.1482E-00	0.8699E 00
0.0692	0.6557E 00	0.1521E 01	0.8086E 00	0.9271E 00	0.5725E 00	0.4631E-00	0.1539E-00	0.8710E 00
0.0769	0.6629E 00	0.1515E 01	0.8159E 00	0.9332E 00	0.5755E 00	0.4696E-00	0.1598E-00	0.8721E 00
0.1154	0.6934E 00	0.1478E 01	0.8427E 00	0.9520E 00	0.5937E 00	0.5005E 00	0.1882E-00	0.8774E 00
0.1538	0.7164E 00	0.1439E 01	0.8593E 00	0.9591E 00	0.6134E 00	0.5272E 00	0.2133E-00	0.8827E 00
0.1923	0.7353E 00	0.1406E 01	0.8716E 00	0.9632E 00	0.6318E 00	0.5508E 00	0.2365E-00	0.8881E 00
0.2308	0.7498E 00	0.1380E 01	0.8805E 00	0.9657E 00	0.6476E 00	0.5704E 00	0.2564E-00	0.8934E 00
0.2692	0.7629E 00	0.1356E 01	0.8883E 00	0.9679E 00	0.6626E 00	0.5887E 00	0.2758E-00	0.8987E 00
0.3077	0.7761E 00	0.1333E 01	0.8960E 00	0.9699E 00	0.6780E 00	0.6076E 00	0.2968E-00	0.9041E 00
0.3462	0.7884E 00	0.1312E 01	0.9029E 00	0.9719E 00	0.6930E 00	0.6259E 00	0.3180E-00	0.9094E 00
0.3846	0.8006E 00	0.1291E 01	0.9097E 00	0.9738E 00	0.7083E 00	0.6445E 00	0.3404E-00	0.9147E 00
0.4231	0.8130E 00	0.1271E 01	0.9164E 00	0.9756E 00	0.7239E 00	0.6636E 00	0.3647E-00	0.9200E 00
0.4615	0.8253E 00	0.1251E 01	0.9228E 00	0.9775E 00	0.7398E 00	0.6829E 00	0.3903E-00	0.9254E 00
0.5000	0.8386E 00	0.1229E 01	0.9296E 00	0.9794E 00	0.7570E 00	0.7039E 00	0.4199E-00	0.9307E 00
0.5385	0.8559E 00	0.1202E 01	0.9382E 00	0.9818E 00	0.7786E 00	0.7307E 00	0.4608E-00	0.9360E 00
0.5769	0.8748E 00	0.1173E 01	0.9473E 00	0.9843E 00	0.8025E 00	0.7604E 00	0.5094E 00	0.9414E 00
0.6154	0.8918E 00	0.1148E 01	0.9552E 00	0.9866E 00	0.8250E 00	0.7882E 00	0.5578E 00	0.9467E 00
0.6538	0.9128E 00	0.1117E 01	0.9645E 00	0.9893E 00	0.8523E 00	0.8223E 00	0.6224E 00	0.9520E 00
0.6923	0.9299E 00	0.1093E 01	0.9719E 00	0.9914E 00	0.8761E 00	0.8517E 00	0.6811E 00	0.9574E 00
0.7308	0.9469E 00	0.1069E 01	0.9790E 00	0.9935E 00	0.9004E 00	0.8817E 00	0.7444E 00	0.9627E 00
0.7692	0.9618E 00	0.1049E 01	0.9850E 00	0.9953E 00	0.9226E 00	0.9090E 00	0.8048E 00	0.9680E 00
0.8077	0.9730E 00	0.1034E 01	0.9894E 00	0.9966E 00	0.9409E 00	0.9312E 00	0.8543E 00	0.9733E 00
0.8462	0.9830E 00	0.1021E 01	0.9933E 00	0.9978E 00	0.9581E 00	0.9520E 00	0.9016E 00	0.9787E 00
0.8846	0.9883E 00	0.1015E 01	0.9954E 00	0.9985E 00	0.9698E 00	0.9656E 00	0.9302E 00	0.9840E 00
0.9231	0.9922E 00	0.1010E 01	0.9968E 00	0.9990E 00	0.9797E 00	0.9769E 00	0.9526E 00	0.9893E 00
0.9615	0.9961E 00	0.1005E 01	0.9984E 00	0.9995E 00	0.9898E 00	0.9885E 00	0.9761E 00	0.9947E 00
1.0000	1.0000E 00	0.1000E 01	0.9999E 00	0.1000E 01	0.9999E 00	0.1000E 01	0.9998E 00	1.0000E 00

TABLE VI - CONTINUED.

(P) $M_\infty = 3.30$ STATION 12 $T_w/T_\delta = 3.107$

$\delta = 0.650$ IN $M_\delta = 3.477$ $T_\delta = 168.8$ °R $U_\delta = 2214$ FT/SEC $T_{T_\delta} = 576.8$ °R

$\rho_\delta = 0.4234 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.9373$ SLUGS/FT² - SEC $P_\delta = 122.63$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3108E 01	0.	0.9095E 00	0.3002E-00	0.	0.1265E-01	0.9329E 00
0.0077	0.4587E-00	0.2090E 01	0.6631E 00	0.9227E 00	0.4466E-00	0.2962E-00	0.5337E-01	0.9334E 00
0.0154	0.5620E 00	0.1811E 01	0.7563E 00	0.9348E 00	0.5155E 00	0.3899E-00	0.9219E-01	0.9338E 00
0.0231	0.5984E 00	0.1732E 01	0.7875E 00	0.9456E 00	0.5395E 00	0.4249E-00	0.1124E-00	0.9343E 00
0.0308	0.6195E 00	0.1693E 01	0.8061E 00	0.9552E 00	0.5521E 00	0.4451E-00	0.1261E-00	0.9348E 00
0.0385	0.6359E 00	0.1662E 01	0.8197E 00	0.9618E 00	0.5627E 00	0.4613E-00	0.1379E-00	0.9353E 00
0.0462	0.6508E 00	0.1634E 01	0.8320E 00	0.9680E 00	0.5726E 00	0.4764E-00	0.1497E-00	0.9357E 00
0.0538	0.6642E 00	0.1609E 01	0.8424E 00	0.9730E 00	0.5819E 00	0.4902E-00	0.1610E-00	0.9362E 00
0.0615	0.6753E 00	0.1588E 01	0.8511E 00	0.9775E 00	0.5896E 00	0.5019E 00	0.1712E-00	0.9367E 00
0.0692	0.6863E 00	0.1567E 01	0.8592E 00	0.9811E 00	0.5979E 00	0.5138E 00	0.1818E-00	0.9372E 00
0.0769	0.6962E 00	0.1549E 01	0.8664E 00	0.9844E 00	0.6054E 00	0.5246E 00	0.1919E-00	0.9376E 00
0.1154	0.7356E 00	0.1477E 01	0.8938E 00	0.9974E 00	0.6365E 00	0.5690E 00	0.2381E-00	0.9400E 00
0.1538	0.7643E 00	0.1424E 01	0.9119E 00	0.1005E 01	0.6619E 00	0.6036E 00	0.2785E-00	0.9424E 00
0.1923	0.7854E 00	0.1387E 01	0.9250E 00	0.1011E 01	0.6810E 00	0.6300E 00	0.3127E-00	0.9447E 00
0.2308	0.8017E 00	0.1358E 01	0.9344E 00	0.1015E 01	0.6972E 00	0.6515E 00	0.3419E-00	0.9471E 00
0.2692	0.8159E 00	0.1334E 01	0.9424E 00	0.1019E 01	0.7116E 00	0.6707E 00	0.3695E-00	0.9494E 00
0.3077	0.8287E 00	0.1311E 01	0.9487E 00	0.1020E 01	0.7262E 00	0.6890E 00	0.3963E-00	0.9518E 00
0.3462	0.8410E 00	0.1287E 01	0.9543E 00	0.1021E 01	0.7411E 00	0.7073E 00	0.4240E-00	0.9542E 00
0.3846	0.8534E 00	0.1265E 01	0.9596E 00	0.1022E 01	0.7563E 00	0.7259E 00	0.4534E-00	0.9565E 00
0.4231	0.8652E 00	0.1241E 01	0.9639E 00	0.1021E 01	0.7726E 00	0.7448E 00	0.4835E-00	0.9589E 00
0.4615	0.8776E 00	0.1215E 01	0.9674E 00	0.1018E 01	0.7910E 00	0.7653E 00	0.5168E 00	0.9612E 00
0.5000	0.8927E 00	0.1187E 01	0.9727E 00	0.1017E 01	0.8115E 00	0.7894E 00	0.5602E 00	0.9636E 00
0.5385	0.9052E 00	0.1164E 01	0.9768E 00	0.1016E 01	0.8295E 00	0.8103E 00	0.5990E 00	0.9660E 00
0.5769	0.9186E 00	0.1142E 01	0.9815E 00	0.1016E 01	0.8481E 00	0.8325E 00	0.6432E 00	0.9683E 00
0.6154	0.9307E 00	0.1120E 01	0.9851E 00	0.1015E 01	0.8663E 00	0.8535E 00	0.6857E 00	0.9707E 00
0.6538	0.9436E 00	0.1098E 01	0.9889E 00	0.1013E 01	0.8858E 00	0.8761E 00	0.7339E 00	0.9731E 00
0.6923	0.9531E 00	0.1082E 01	0.9913E 00	0.1012E 01	0.9015E 00	0.8938E 00	0.7719E 00	0.9754E 00
0.7308	0.9640E 00	0.1064E 01	0.9942E 00	0.1011E 01	0.9202E 00	0.9149E 00	0.8183E 00	0.9789E 00
0.7692	0.9742E 00	0.1048E 01	0.9971E 00	0.1010E 01	0.9365E 00	0.9339E 00	0.8635E 00	0.9812E 00
0.8077	0.9822E 00	0.1034E 01	0.9988E 00	0.1009E 01	0.9511E 00	0.9501E 00	0.9010E 00	0.9836E 00
0.8462	0.9885E 00	0.1023E 01	0.9998E 00	0.1007E 01	0.9637E 00	0.9636E 00	0.9320E 00	0.9859E 00
0.8846	0.9927E 00	0.1015E 01	0.1000E 01	0.1005E 01	0.9742E 00	0.9744E 00	0.9544E 00	0.9887E 00
0.9231	0.9955E 00	0.1009E 01	0.9999E 00	0.1003E 01	0.9843E 00	0.9843E 00	0.9719E 00	0.9930E 00
0.9615	0.9981E 00	0.1004E 01	1.0000E 00	0.1001E 01	0.9919E 00	0.9920E 00	0.9872E 00	0.9957E 00
1.0000	0.9999E 00	0.9999E 00	0.9998E 00	0.9999E 00	0.1000E 01	1.0000E 00	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(q) M_∞ = 3.30 STATION 14 T_w/T_δ = 3.131

δ = 0.650 IN M_δ = 3.503 T_δ = 167.6 °R U_δ = 2223 FT/SEC T_{T_δ} = 579.0 °R

ρ_δ = 0.4176 × 10^{-3} SLUGS/FT³ $\rho_\delta U_\delta$ = 0.9283 SLUGS/FT²-SEC P_δ = 120.09 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3132E 01	0.	0.9066E 00	0.3167E-00	0.	0.1294E-01	0.9914E 00
0.0077	0.4159E-00	0.2185E 01	0.6146E 00	0.9009E 00	0.4541E-00	0.2789E-00	0.4463E-01	0.9914E 00
0.0154	0.5174E 00	0.1891E 01	0.7114E 00	0.9071E 00	0.5246E 00	0.3729E-00	0.7576E-01	0.9914E 00
0.0231	0.5640E 00	0.1770E 01	0.7502E 00	0.9124E 00	0.5604E 00	0.4201E-00	0.9744E-01	0.9914E 00
0.0308	0.5929E 00	0.1702E 01	0.7733E 00	0.9177E 00	0.5829E 00	0.4504E-00	0.1141E-00	0.9914E 00
0.0385	0.6108E 00	0.1665E 01	0.7879E 00	0.9230E 00	0.5960E 00	0.4692E-00	0.1259E-00	0.9914E 00
0.0462	0.6257E 00	0.1636E 01	0.8001E 00	0.9284E 00	0.6065E 00	0.4850E-00	0.1366E-00	0.9914E 00
0.0538	0.6390E 00	0.1610E 01	0.8105E 00	0.9328E 00	0.6163E 00	0.4992E-00	0.1469E-00	0.9914E 00
0.0615	0.6516E 00	0.1585E 01	0.8202E 00	0.9370E 00	0.6258E 00	0.5129E 00	0.1574E-00	0.9914E 00
0.0692	0.6636E 00	0.1562E 01	0.8293E 00	0.9410E 00	0.6349E 00	0.5262E 00	0.1681E-00	0.9914E 00
0.0769	0.6748E 00	0.1542E 01	0.8377E 00	0.9449E 00	0.6435E 00	0.5387E 00	0.1787E-00	0.9914E 00
0.1154	0.7207E 00	0.1454E 01	0.8689E 00	0.9575E 00	0.6822E 00	0.5924E 00	0.2297E-00	0.9914E 00
0.1538	0.7569E 00	0.1388E 01	0.8916E 00	0.9668E 00	0.7147E 00	0.6368E 00	0.2796E-00	0.9914E 00
0.1923	0.7846E 00	0.1339E 01	0.9077E 00	0.9732E 00	0.7408E 00	0.6720E 00	0.3244E-00	0.9914E 00
0.2308	0.8047E 00	0.1304E 01	0.9187E 00	0.9772E 00	0.7608E 00	0.6985E 00	0.3613E-00	0.9914E 00
0.2692	0.8222E 00	0.1273E 01	0.9277E 00	0.9802E 00	0.7791E 00	0.7222E 00	0.3967E-00	0.9914E 00
0.3077	0.8370E 00	0.1248E 01	0.9347E 00	0.9820E 00	0.7952E 00	0.7428E 00	0.4290E-00	0.9914E 00
0.3462	0.8495E 00	0.1226E 01	0.9405E 00	0.9835E 00	0.8090E 00	0.7604E 00	0.4582E-00	0.9914E 00
0.3846	0.8613E 00	0.1206E 01	0.9458E 00	0.9850E 00	0.8223E 00	0.7772E 00	0.4875E-00	0.9914E 00
0.4231	0.8729E 00	0.1187E 01	0.9510E 00	0.9863E 00	0.8356E 00	0.7941E 00	0.5182E 00	0.9914E 00
0.4615	0.8844E 00	0.1169E 01	0.9559E 00	0.9877E 00	0.8488E 00	0.8109E 00	0.5501E 00	0.9914E 00
0.5000	0.8974E 00	0.1148E 01	0.9614E 00	0.9892E 00	0.8641E 00	0.8302E 00	0.5886E 00	0.9914E 00
0.5385	0.9088E 00	0.1130E 01	0.9661E 00	0.9904E 00	0.8777E 00	0.8473E 00	0.6244E 00	0.9914E 00
0.5769	0.9227E 00	0.1109E 01	0.9716E 00	0.9920E 00	0.8944E 00	0.8684E 00	0.6706E 00	0.9914E 00
0.6154	0.9308E 00	0.1097E 01	0.9748E 00	0.9928E 00	0.9042E 00	0.8808E 00	0.6986E 00	0.9914E 00
0.6538	0.9395E 00	0.1084E 01	0.9781E 00	0.9937E 00	0.9149E 00	0.8942E 00	0.7305E 00	0.9914E 00
0.6923	0.9504E 00	0.1069E 01	0.9822E 00	0.9949E 00	0.9284E 00	0.9113E 00	0.7721E 00	0.9914E 00
0.7308	0.9629E 00	0.1051E 01	0.9868E 00	0.9962E 00	0.9443E 00	0.9317E 00	0.8230E 00	0.9914E 00
0.7692	0.9731E 00	0.1036E 01	0.9905E 00	0.9972E 00	0.9572E 00	0.9475E 00	0.8663E 00	0.9914E 00
0.8077	0.9802E 00	0.1027E 01	0.9930E 00	0.9979E 00	0.9678E 00	0.9603E 00	0.8992E 00	0.9928E 00
0.8462	0.9863E 00	0.1018E 01	0.9951E 00	0.9985E 00	0.9768E 00	0.9713E 00	0.9280E 00	0.9940E 00
0.8846	0.9908E 00	0.1012E 01	0.9967E 00	0.9990E 00	0.9837E 00	0.9798E 00	0.9501E 00	0.9952E 00
0.9231	0.9946E 00	0.1007E 01	0.9980E 00	0.9994E 00	0.9899E 00	0.9872E 00	0.9693E 00	0.9964E 00
0.9615	0.9984E 00	0.1002E 01	0.9993E 00	0.9998E 00	0.9968E 00	0.9954E 00	0.9900E 00	0.9982E 00
1.0000	0.1000E 01	0.9999E 00	0.9999E 00	0.9999E 00	0.1001E 01	1.0000E 00	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(r) $M_\infty = 3.30$ STATION 18 $T_w/T_\delta = 3.023$
$\delta = 0.850$ IN $M_\delta = 3.402$ $T_\delta = 172.8$ °R $U_\delta = 2192$ FT/SEC $T_{T_\delta} = 572.9$ °R
$\rho_\delta = 0.3719 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.8152$ SLUGS/FT²-SEC $P_\delta = 110.31$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3024E 01	0.	0.9120E 00	0.3308E-00	0.	0.1509E-01	0.1000E 01
0.0059	0.3669E-00	0.2193E 01	0.5432E 00	0.8675E 00	0.4562E-00	0.2478E-00	0.3896E-01	0.1000E 01
0.0118	0.4456E-00	0.1991E 01	0.6288E 00	0.8768E 00	0.5023E 00	0.3158E-00	0.5666E-01	0.1000E 01
0.0176	0.4961E-00	0.1871E 01	0.6785E 00	0.8858E 00	0.5347E 00	0.3628E-00	0.7309E-01	0.1000E 01
0.0235	0.5248E 00	0.1810E 01	0.7060E 00	0.8941E 00	0.5526E 00	0.3901E-00	0.8473E-01	0.1000E 01
0.0294	0.5485E 00	0.1764E 01	0.7285E 00	0.9028E 00	0.5670E 00	0.4130E-00	0.9589E-01	0.1000E 01
0.0353	0.5680E 00	0.1727E 01	0.7462E 00	0.9097E 00	0.5794E 00	0.4323E-00	0.1062E-00	0.1000E 01
0.0412	0.5856E 00	0.1693E 01	0.7619E 00	0.9161E 00	0.5908E 00	0.4501E-00	0.1166E-00	0.1000E 01
0.0471	0.6011E 00	0.1663E 01	0.7752E 00	0.9213E 00	0.6015E 00	0.4662E-00	0.1266E-00	0.1000E 01
0.0529	0.6148E 00	0.1638E 01	0.7866E 00	0.9260E 00	0.6109E 00	0.4806E-00	0.1361E-00	0.1000E 01
0.0588	0.6271E 00	0.1615E 01	0.7968E 00	0.9305E 00	0.6194E 00	0.4935E-00	0.1453E-00	0.1000E 01
0.0882	0.6762E 00	0.1523E 01	0.8344E 00	0.9456E 00	0.6568E 00	0.5480E 00	0.1887E-00	0.1000E 01
0.1176	0.7139E 00	0.1455E 01	0.8611E 00	0.9568E 00	0.6974E 00	0.5920E 00	0.2307E-00	0.1000E 01
0.1471	0.7451E 00	0.1399E 01	0.8813E 00	0.9644E 00	0.7150E 00	0.6301E 00	0.2721E-00	0.1000E 01
0.1765	0.7715E 00	0.1354E 01	0.8975E 00	0.9707E 00	0.7391E 00	0.6633E 00	0.3127E-00	0.1000E 01
0.2059	0.7930E 00	0.1308E 01	0.9067E 00	0.9685E 00	0.7650E 00	0.6936E 00	0.3499E-00	0.1000E 01
0.2353	0.8116E 00	0.1284E 01	0.9197E 00	0.9781E 00	0.7788E 00	0.7163E 00	0.3857E-00	0.1000E 01
0.2647	0.8287E 00	0.1255E 01	0.9283E 00	0.9803E 00	0.7970E 00	0.7398E 00	0.4215E-00	0.1000E 01
0.2941	0.8435E 00	0.1230E 01	0.9355E 00	0.9823E 00	0.8131E 00	0.7606E 00	0.4551E-00	0.1000E 01
0.3235	0.8562E 00	0.1209E 01	0.9415E 00	0.9839E 00	0.8271E 00	0.7787E 00	0.4859E-00	0.1000E 01
0.3529	0.8685E 00	0.1190E 01	0.9472E 00	0.9854E 00	0.8408E 00	0.7964E 00	0.5174E 00	0.1000E 01
0.3824	0.8808E 00	0.1170E 01	0.9527E 00	0.9869E 00	0.8548E 00	0.8144E 00	0.5512E 00	0.1000E 01
0.4118	0.8912E 00	0.1154E 01	0.9573E 00	0.9881E 00	0.8667E 00	0.8297E 00	0.5811E 00	0.1000E 01
0.4412	0.9014E 00	0.1139E 01	0.9617E 00	0.9893E 00	0.8786E 00	0.8450E 00	0.6121E 00	0.1000E 01
0.4706	0.9128E 00	0.1121E 01	0.9666E 00	0.9907E 00	0.8920E 00	0.8622E 00	0.6484E 00	0.1000E 01
0.5000	0.9265E 00	0.1101E 01	0.9722E 00	0.9922E 00	0.9084E 00	0.8831E 00	0.6949E 00	0.1000E 01
0.5294	0.9401E 00	0.1082E 01	0.9776E 00	0.9937E 00	0.9247E 00	0.9041E 00	0.7437E 00	0.1000E 01
0.5588	0.9493E 00	0.1068E 01	0.9815E 00	0.9948E 00	0.9367E 00	0.9193E 00	0.7807E 00	0.1000E 01
0.5882	0.9582E 00	0.1056E 01	0.9847E 00	0.9957E 00	0.9471E 00	0.9326E 00	0.8141E 00	0.1000E 01
0.6176	0.9654E 00	0.1046E 01	0.9874E 00	0.9965E 00	0.9560E 00	0.9440E 00	0.8435E 00	0.1000E 01
0.6471	0.9720E 00	0.1037E 01	0.9899E 00	0.9972E 00	0.9643E 00	0.9546E 00	0.8717E 00	0.1000E 01
0.6765	0.9772E 00	0.1030E 01	0.9918E 00	0.9977E 00	0.9709E 00	0.9629E 00	0.8943E 00	0.1000E 01
0.7059	0.9812E 00	0.1025E 01	0.9933E 00	0.9981E 00	0.9759E 00	0.9694E 00	0.9120E 00	0.1000E 01
0.7353	0.9861E 00	0.1018E 01	0.9951E 00	0.9986E 00	0.9822E 00	0.9773E 00	0.9343E 00	0.1000E 01
0.7647	0.9900E 00	0.1013E 01	0.9965E 00	0.9990E 00	0.9873E 00	0.9838E 00	0.9526E 00	0.1000E 01
0.7941	0.9924E 00	0.1010E 01	0.9973E 00	0.9993E 00	0.9902E 00	0.9876E 00	0.9635E 00	0.1000E 01
0.8235	0.9935E 00	0.1009E 01	0.9977E 00	0.9994E 00	0.9917E 00	0.9895E 00	0.9689E 00	0.1000E 01
0.8529	0.9947E 00	0.1007E 01	0.9981E 00	0.9995E 00	0.9932E 00	0.9914E 00	0.9744E 00	0.1000E 01
0.8824	0.9958E 00	0.1006E 01	0.9985E 00	0.9996E 00	0.9947E 00	0.9932E 00	0.9800E 00	0.1000E 01
0.9118	0.9970E 00	0.1004E 01	0.9989E 00	0.9997E 00	0.9962E 00	0.9951E 00	0.9855E 00	0.1000E 01
0.9412	0.9981E 00	0.1003E 01	0.9994E 00	0.9999E 00	0.9977E 00	0.9970E 00	0.9911E 00	0.1000E 01
0.9706	0.9993E 00	0.1001E 01	0.9998E 00	1.0000E 00	0.9992E 00	0.9989E 00	0.9967E 00	0.1000E 01
1.0000	1.0000E 00	0.1000E 01	1.0000E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(8) M_∞ = 4.50 STATION 12 T_w/T_δ = 4.374

δ = 0.875 IN M_δ = 4.404 T_δ = 118.8 °R U_δ = 2352 FT/SEC T_{T_δ} = 579.5 °R

ρ_δ = 0.1695 × 10^{-3} SLUGS/FT³ $\rho_\delta U_\delta$ = 0.4457 SLUGS/FT² - SEC P_δ = 38.61 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.4375E 01	0.	0.8968E 00	0.1952E-00	0.	0.3331E-02	0.8544E 00
0.0057	0.1133E-00	0.4419E 01	0.2382E-00	0.9510E 00	0.1933E-00	0.4603E-01	0.3949E-02	0.8544E 00
0.0114	0.2675E-00	0.3631E 01	0.5098E 00	0.9510E 00	0.2352E-00	0.1199E-00	0.7847E-02	0.8544E 00
0.0171	0.3376E-00	0.3217E 01	0.6057E 00	0.9510E 00	0.2655E-00	0.1608E-00	0.1200E-01	0.8544E 00
0.0229	0.3857E-00	0.2941E 01	0.6617E 00	0.9510E 00	0.2904E-00	0.1921E-00	0.1641E-01	0.8544E 00
0.0286	0.4217E-00	0.2744E 01	0.6987E 00	0.9506E 00	0.3112E-00	0.2174E-00	0.2088E-01	0.8544E 00
0.0343	0.4485E-00	0.2599E 01	0.7232E 00	0.9486E 00	0.3286E-00	0.2376E-00	0.2507E-01	0.8544E 00
0.0400	0.4691E-00	0.2492E 01	0.7407E 00	0.9469E 00	0.3427E-00	0.2538E-00	0.2887E-01	0.8544E 00
0.0457	0.4853E-00	0.2411E 01	0.7538E 00	0.9459E 00	0.3542E-00	0.2670E-00	0.3229E-01	0.8544E 00
0.0514	0.4978E-00	0.2351E 01	0.7634E 00	0.9452E 00	0.3632E-00	0.2773E-00	0.3518E-01	0.8544E 00
0.0571	0.5088E 00	0.2301E 01	0.7719E 00	0.9453E 00	0.3712E-00	0.2865E-00	0.3795E-01	0.8544E 00
0.0857	0.5525E 00	0.2111E 01	0.8028E 00	0.9449E 00	0.4048E-00	0.3250E-00	0.5129E-01	0.8548E 00
0.1143	0.5854E 00	0.1986E 01	0.8251E 00	0.9482E 00	0.4305E-00	0.3552E-00	0.6429E-01	0.8552E 00
0.1429	0.6138E 00	0.1877E 01	0.8410E 00	0.9469E 00	0.4557E-00	0.3833E-00	0.7802E-01	0.8556E 00
0.1714	0.6417E 00	0.1787E 01	0.8580E 00	0.9515E 00	0.4789E-00	0.4109E-00	0.9426E-01	0.8560E 00
0.2000	0.6685E 00	0.1706E 01	0.8734E 00	0.9561E 00	0.5018E 00	0.4383E-00	0.1128E-00	0.8564E 00
0.2286	0.6887E 00	0.1648E 01	0.8843E 00	0.9594E 00	0.5197E 00	0.4595E-00	0.1289E-00	0.8568E 00
0.2571	0.7096E 00	0.1590E 01	0.8950E 00	0.9627E 00	0.5391E 00	0.4825E-00	0.1480E-00	0.8576E 00
0.2857	0.7267E 00	0.1545E 01	0.9034E 00	0.9653E 00	0.5557E 00	0.5020E 00	0.1656E-00	0.8588E 00
0.3143	0.7418E 00	0.1506E 01	0.9105E 00	0.9676E 00	0.5710E 00	0.5199E 00	0.1829E-00	0.8600E 00
0.3429	0.7572E 00	0.1467E 01	0.9174E 00	0.9698E 00	0.5870E 00	0.5385E 00	0.2021E-00	0.8617E 00
0.3714	0.7711E 00	0.1434E 01	0.9235E 00	0.9718E 00	0.6025E 00	0.5564E 00	0.2214E-00	0.8641E 00
0.4000	0.7836E 00	0.1404E 01	0.9288E 00	0.9736E 00	0.6174E 00	0.5735E 00	0.2406E-00	0.8674E 00
0.4286	0.7961E 00	0.1376E 01	0.9340E 00	0.9753E 00	0.6333E 00	0.5915E 00	0.2614E-00	0.8714E 00
0.4571	0.8068E 00	0.1352E 01	0.9383E 00	0.9768E 00	0.6478E 00	0.6078E 00	0.2809E-00	0.8759E 00
0.4857	0.8196E 00	0.1324E 01	0.9432E 00	0.9785E 00	0.6642E 00	0.6265E 00	0.3053E-00	0.8796E 00
0.5143	0.8322E 00	0.1297E 01	0.9480E 00	0.9802E 00	0.6816E 00	0.6462E 00	0.3316E-00	0.8845E 00
0.5429	0.8452E 00	0.1270E 01	0.9528E 00	0.9819E 00	0.6997E 00	0.6666E 00	0.3610E-00	0.8889E 00
0.5714	0.8588E 00	0.1243E 01	0.9576E 00	0.9836E 00	0.7193E 00	0.6886E 00	0.3942E-00	0.8942E 00
0.6000	0.8726E 00	0.1216E 01	0.9623E 00	0.9852E 00	0.7387E 00	0.7108E 00	0.4303E-00	0.8983E 00
0.6286	0.8856E 00	0.1191E 01	0.9666E 00	0.9868E 00	0.7582E 00	0.7329E 00	0.4677E-00	0.9032E 00
0.6571	0.8992E 00	0.1165E 01	0.9710E 00	0.9884E 00	0.7802E 00	0.7576E 00	0.5107E 00	0.9097E 00
0.6857	0.9106E 00	0.1145E 01	0.9746E 00	0.9897E 00	0.7992E 00	0.7789E 00	0.5495E 00	0.9154E 00
0.7143	0.9240E 00	0.1121E 01	0.9787E 00	0.9912E 00	0.8210E 00	0.8035E 00	0.5977E 00	0.9211E 00
0.7429	0.9349E 00	0.1103E 01	0.9820E 00	0.9925E 00	0.8409E 00	0.8257E 00	0.6413E 00	0.9276E 00
0.7714	0.9453E 00	0.1085E 01	0.9850E 00	0.9936E 00	0.8608E 00	0.8479E 00	0.6862E 00	0.9345E 00
0.8000	0.9560E 00	0.1068E 01	0.9880E 00	0.9948E 00	0.8825E 00	0.8719E 00	0.7355E 00	0.9426E 00
0.8286	0.9674E 00	0.1049E 01	0.9912E 00	0.9961E 00	0.9045E 00	0.8966E 00	0.7908E 00	0.9496E 00
0.8571	0.9779E 00	0.1033E 01	0.9941E 00	0.9972E 00	0.9269E 00	0.9214E 00	0.8464E 00	0.9577E 00
0.8857	0.9861E 00	0.1020E 01	0.9963E 00	0.9981E 00	0.9455E 00	0.9413E 00	0.8930E 00	0.9650E 00
0.9143	0.9937E 00	0.1009E 01	0.9983E 00	0.9989E 00	0.9642E 00	0.9626E 00	0.9395E 00	0.9731E 00
0.9429	0.9979E 00	0.1003E 01	0.9994E 00	0.9995E 00	0.9788E 00	0.9783E 00	0.9707E 00	0.9817E 00
0.9714	0.9993E 00	0.1001E 01	0.9999E 00	0.9998E 00	0.9900E 00	0.9899E 00	0.9877E 00	0.9910E 00
1.0000	1.0000E 00	0.9999E 00	0.1000E 01	0.1000E 01	0.9997E 00	0.9999E 00	0.1000E 01	0.1000E 01

TABLE VI - CONTINUED.

(t) $M_\infty = 4.50$ STATION 14 $T_w/T_\delta = 4.223$

$\delta = 0.900$ IN $M_\delta = 4.295$ $T_\delta = 121.5$ °R $U_\delta = 2320$ FT/SEC $T_{T_\delta} = 569.6$ °R

$\rho_\delta = 0.1647 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.3821$ SLUGS/FT²-SEC $P_\delta = 34.32$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.4223E 01	0.	0.9009E 00	0.2196E-00	0.	0.4153E-02	0.9277E 00
0.0056	0.1636E-00	0.3845E 01	0.3212E-00	0.9013E 00	0.2412E-00	0.7749E-01	0.5779E-02	0.9277E 00
0.0111	0.3037E-00	0.3151E 01	0.5393E 00	0.9010E 00	0.2943E-00	0.1587E-00	0.1157E-01	0.9277E 00
0.0167	0.3714E-00	0.2793E 01	0.6208E 00	0.8989E 00	0.3321E-00	0.2062E-00	0.1752E-01	0.9277E 00
0.0222	0.4036E-00	0.2618E 01	0.6532E 00	0.8943E 00	0.3542E-00	0.2314E-00	0.2156E-01	0.9277E 00
0.0278	0.4264E-00	0.2494E 01	0.6735E 00	0.8888E 00	0.3719E-00	0.2505E-00	0.2504E-01	0.9277E 00
0.0333	0.4441E-00	0.2401E 01	0.6883E 00	0.8849E 00	0.3862E-00	0.2658E-00	0.2814E-01	0.9277E 00
0.0389	0.4585E-00	0.2324E 01	0.6990E 00	0.8802E 00	0.3991E-00	0.2790E-00	0.3097E-01	0.9277E 00
0.0444	0.4712E-00	0.2260E 01	0.7083E 00	0.8767E 00	0.4105E-00	0.2907E-00	0.3371E-01	0.9277E 00
0.0500	0.4823E-00	0.2205E 01	0.7162E 00	0.8740E 00	0.4206E-00	0.3013E-00	0.3631E-01	0.9277E 00
0.0556	0.4932E-00	0.2160E 01	0.7248E 00	0.8740E 00	0.4295E-00	0.3113E-00	0.3906E-01	0.9277E 00
0.0333	0.5377E 00	0.2004E 01	0.7512E 00	0.8832E 00	0.4629E-00	0.3523E-00	0.5268E-01	0.9277E 00
0.1111	0.5726E 00	0.1900E 01	0.7894E 00	0.8956E 00	0.4881E-00	0.3853E-00	0.6659E-01	0.9277E 00
0.1389	0.6045E 00	0.1814E 01	0.0144E 00	0.9088E 00	0.5112E 00	0.4163E-00	0.8240E-01	0.9277E 00
0.1667	0.6330E 00	0.1743E 01	0.8358E 00	0.9214E 00	0.5321E 00	0.4447E-00	0.9950E-01	0.9277E 00
0.1944	0.6575E 00	0.1685E 01	0.8537E 00	0.9328E 00	0.5504E 00	0.4699E-00	0.1169E-00	0.9277E 00
0.2222	0.6803E 00	0.1630E 01	0.8688E 00	0.9416E 00	0.5689E 00	0.4943E-00	0.1357E-00	0.9277E 00
0.2500	0.7016E 00	0.1580E 01	0.8821E 00	0.9493E 00	0.5869E 00	0.5177E 00	0.1556E-00	0.9277E 00
0.2778	0.7173E 00	0.1544E 01	0.8913E 00	0.9544E 00	0.6008E 00	0.5355E 00	0.1721E-00	0.9277E 00
0.3056	0.7334E 00	0.1506E 01	0.9003E 00	0.9590E 00	0.6157E 00	0.5543E 00	0.1908E-00	0.9277E 00
0.3333	0.7461E 00	0.1477E 01	0.9070E 00	0.9624E 00	0.6278E 00	0.5694E 00	0.2067E-00	0.9277E 00
0.3611	0.7602E 00	0.1446E 01	0.9142E 00	0.9660E 00	0.6414E 00	0.5864E 00	0.2258E-00	0.9277E 00
0.3889	0.7724E 00	0.1419E 01	0.9201E 00	0.9687E 00	0.6537E 00	0.6015E 00	0.2437E-00	0.9277E 00
0.4167	0.7845E 00	0.1393E 01	0.9258E 00	0.9714E 00	0.6660E 00	0.6166E 00	0.2627E-00	0.9277E 00
0.4444	0.7978E 00	0.1364E 01	0.9319E 00	0.9742E 00	0.6799E 00	0.6336E 00	0.2852E-00	0.9277E 00
0.4722	0.8102E 00	0.1338E 01	0.9373E 00	0.9766E 00	0.6931E 00	0.6497E 00	0.3077E-00	0.9277E 00
0.5000	0.8238E 00	0.1310E 01	0.9429E 00	0.9789E 00	0.7082E 00	0.6677E 00	0.3344E-00	0.9277E 00
0.5278	0.8358E 00	0.1286E 01	0.9480E 00	0.9814E 00	0.7212E 00	0.6837E 00	0.3596E-00	0.9277E 00
0.5556	0.8491E 00	0.1259E 01	0.9527E 00	0.9827E 00	0.7367E 00	0.7019E 00	0.3894E-00	0.9277E 00
0.5833	0.8637E 00	0.1230E 01	0.9581E 00	0.9845E 00	0.7546E 00	0.7230E 00	0.4256E-00	0.9282E 00
0.6111	0.8758E 00	0.1207E 01	0.9622E 00	0.9859E 00	0.7704E 00	0.7413E 00	0.4577E-00	0.9300E 00
0.6389	0.8871E 00	0.1186E 01	0.9661E 00	0.9872E 00	0.7864E 00	0.7597E 00	0.4905E-00	0.9326E 00
0.6667	0.8986E 00	0.1165E 01	0.9699E 00	0.9886E 00	0.8032E 00	0.7790E 00	0.5264E 00	0.9358E 00
0.6944	0.9103E 00	0.1144E 01	0.9737E 00	0.9899E 00	0.8210E 00	0.7994E 00	0.5657E 00	0.9393E 00
0.7222	0.9230E 00	0.1122E 01	0.9777E 00	0.9913E 00	0.8404E 00	0.8216E 00	0.6111E 00	0.9429E 00
0.7500	0.9343E 00	0.1103E 01	0.9811E 00	0.9926E 00	0.8581E 00	0.8419E 00	0.6542E 00	0.9465E 00
0.7778	0.9448E 00	0.1085E 01	0.9843E 00	0.9937E 00	0.8761E 00	0.8623E 00	0.6980E 00	0.9509E 00
0.8056	0.9545E 00	0.1069E 01	0.9872E 00	0.9948E 00	0.8932E 00	0.8818E 00	0.7411E 00	0.9554E 00
0.8333	0.9640E 00	0.1054E 01	0.9899E 00	0.9959E 00	0.9115E 00	0.9023E 00	0.7864E 00	0.9612E 00
0.8611	0.9743E 00	0.1030E 01	0.9928E 00	0.9969E 00	0.9303E 00	0.9236E 00	0.8373E 00	0.9661E 00
0.8889	0.9831E 00	0.1025E 01	0.9953E 00	0.9979E 00	0.9487E 00	0.9442E 00	0.8852E 00	0.9723E 00
0.9167	0.9882E 00	0.1017E 01	0.9967E 00	0.9985E 00	0.9623E 00	0.9591E 00	0.9166E 00	0.9790E 00
0.9444	0.9928E 00	0.1010E 01	0.9980E 00	0.9991E 00	0.9750E 00	0.9730E 00	0.9463E 00	0.9853E 00
0.9722	0.9961E 00	0.1005E 01	0.9989E 00	0.9996E 00	0.9871E 00	0.9861E 00	0.9711E 00	0.9929E 00
1.0000	0.1000E 01	0.9997E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01

TABLE VI - CONTINUED.

-(u) $M_\infty = 4.50$ STATION 18 $T_w/T_\delta = 3.702$

$\delta = 0.750$ IN $M_\delta = 3.947$ $T_\delta = 141.4$ °R $U_\delta = 2300$ FT/SEC $T_{T_\delta} = 582.0$ °R

$\rho_\delta = 0.1761 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.4051$ SLUGS/FT²-SEC $P_\delta = 42.73$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3702E 01	0.	0.8994E 00	0.2768E-00	0.	0.7244E-02	0.1025E 01
0.0067	0.2634E-00	0.2907E 01	0.4492E-00	0.8589E 00	0.3525E-00	0.1583E-00	0.1436E-01	0.1025E 01
0.0133	0.3308E-00	0.2653E 01	0.5390E 00	0.8644E 00	0.3862E-00	0.2081E-00	0.2022E-01	0.1025E 01
0.0200	0.3681E-00	0.2517E 01	0.5841E 00	0.8698E 00	0.4071E-00	0.2377E-00	0.2484E-01	0.1025E 01
0.0267	0.3912E-00	0.2438E 01	0.6109E 00	0.8748E 00	0.4203E-00	0.2567E-00	0.2834E-01	0.1025E 01
0.0333	0.4079E-00	0.2386E 01	0.6302E 00	0.8803E 00	0.4294E-00	0.2705E-00	0.3124E-01	0.1025E 01
0.0400	0.4203E-00	0.2349E 01	0.6441E 00	0.8846E 00	0.4363E-00	0.2810E-00	0.3360E-01	0.1025E 01
0.0467	0.4334E-00	0.2309E 01	0.6587E 00	0.8893E 00	0.4438E-00	0.2923E-00	0.3633E-01	0.1025E 01
0.0533	0.4439E-00	0.2277E 01	0.6698E 00	0.8927E 00	0.4501E-00	0.3014E-00	0.3868E-01	0.1025E 01
0.0600	0.4530E-00	0.2250E 01	0.6795E 00	0.8960E 00	0.4555E-00	0.3095E-00	0.4085E-01	0.1025E 01
0.0667	0.4630E-00	0.2219E 01	0.6898E 00	0.8992E 00	0.4618E-00	0.3185E-00	0.4340E-01	0.1025E 01
0.1000	0.5040E 00	0.2096E 01	0.7297E 00	0.9121E 00	0.4890E-00	0.3567E-00	0.5573E-01	0.1025E 01
0.1333	0.5399E 00	0.1991E 01	0.7619E 00	0.9230E 00	0.5148E 00	0.3921E-00	0.6953E-01	0.1025E 01
0.1667	0.5727E 00	0.1897E 01	0.7888E 00	0.9317E 00	0.5403E 00	0.4261E-00	0.8513E-01	0.1025E 01
0.2000	0.6012E 00	0.1819E 01	0.8109E 00	0.9395E 00	0.5634E 00	0.4568E-00	0.1015E-00	0.1025E 01
0.2333	0.6275E 00	0.1749E 01	0.8300E 00	0.9463E 00	0.5859E 00	0.4862E-00	0.1194E-00	0.1025E 01
0.2667	0.6536E 00	0.1682E 01	0.8478E 00	0.9526E 00	0.6092E 00	0.5163E 00	0.1400E-00	0.1025E 01
0.3000	0.6801E 00	0.1616E 01	0.8647E 00	0.9586E 00	0.6340E 00	0.5482E 00	0.1646E-00	0.1025E 01
0.3333	0.7042E 00	0.1559E 01	0.8794E 00	0.9641E 00	0.6572E 00	0.5778E 00	0.1905E-00	0.1025E 01
0.3667	0.7275E 00	0.1504E 01	0.8923E 00	0.9680E 00	0.6813E 00	0.6078E 00	0.2191E-00	0.1025E 01
0.4000	0.7507E 00	0.1451E 01	0.9043E 00	0.9714E 00	0.7063E 00	0.6386E 00	0.2517E-00	0.1025E 01
0.4333	0.7706E 00	0.1407E 01	0.9141E 00	0.9742E 00	0.7284E 00	0.6657E 00	0.2831E-00	0.1025E 01
0.4667	0.7900E 00	0.1365E 01	0.9233E 00	0.9769E 00	0.7505E 00	0.6928E 00	0.3173E-00	0.1025E 01
0.5000	0.8090E 00	0.1326E 01	0.9318E 00	0.9794E 00	0.7725E 00	0.7197E 00	0.3544E-00	0.1025E 01
0.5333	0.8263E 00	0.1292E 01	0.9393E 00	0.9816E 00	0.7932E 00	0.7449E 00	0.3917E-00	0.1025E 01
0.5667	0.8421E 00	0.1261E 01	0.9459E 00	0.9836E 00	0.8122E 00	0.7681E 00	0.4288E-00	0.1025E 01
0.6000	0.8582E 00	0.1231E 01	0.9523E 00	0.9855E 00	0.8320E 00	0.7922E 00	0.4700E-00	0.1024E 01
0.6333	0.8735E 00	0.1203E 01	0.9583E 00	0.9873E 00	0.8511E 00	0.8154E 00	0.5124E 00	0.1024E 01
0.6667	0.8897E 00	0.1175E 01	0.9643E 00	0.9892E 00	0.8716E 00	0.8403E 00	0.5611E 00	0.1024E 01
0.7000	0.9041E 00	0.1150E 01	0.9695E 00	0.9907E 00	0.8898E 00	0.8625E 00	0.6076E 00	0.1023E 01
0.7333	0.9192E 00	0.1124E 01	0.9748E 00	0.9923E 00	0.9085E 00	0.8855E 00	0.6596E 00	0.1021E 01
0.7667	0.9328E 00	0.1102E 01	0.9794E 00	0.9937E 00	0.9249E 00	0.9056E 00	0.7093E 00	0.1019E 01
0.8000	0.9477E 00	0.1079E 01	0.9843E 00	0.9952E 00	0.9425E 00	0.9275E 00	0.7672E 00	0.1016E 01
0.8333	0.9620E 00	0.1056E 01	0.9888E 00	0.9966E 00	0.9603E 00	0.9494E 00	0.8276E 00	0.1014E 01
0.8667	0.9745E 00	0.1037E 01	0.9927E 00	0.9978E 00	0.9750E 00	0.9677E 00	0.8826E 00	0.1011E 01
0.9000	0.9848E 00	0.1022E 01	0.9957E 00	0.9987E 00	0.9868E 00	0.9824E 00	0.9300E 00	0.1009E 01
0.9333	0.9909E 00	0.1013E 01	0.9975E 00	0.9992E 00	0.9927E 00	0.9901E 00	0.9581E 00	0.1006E 01
0.9667	0.9955E 00	0.1007E 01	0.9988E 00	0.9996E 00	0.9964E 00	0.9950E 00	0.9789E 00	0.1003E 01
1.0000	0.1000E 01	1.0000E 00	0.1000E 01	1.0000E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01

TABLE VI - CONCLUDED.

(V) $M_\infty = 4.50$ STATION 22 $T_w/T_\delta = 4.159$

$\delta = 0.850$ IN $M_\delta = 4.249$ $T_\delta = 125.7$ °R $U_\delta = 2335$ FT/SEC $T_{T_\delta} = 579.7$ °R

$\rho_\delta = 0.1591 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.3715$ SLUGS/FT²-SEC $P_\delta = 34.32$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.4159E 01	0.	0.9018E 00	0.2336E-00	0.	0.4617E-02	0.9713E 00
0.0059	0.1056E-00	0.3937E 01	0.2095E-00	0.8880E 00	0.2468E-00	0.5171E-01	0.5301E-02	0.9713E 00
0.0118	0.2755E-00	0.3192E 01	0.4923E-00	0.8820E 00	0.3044E-00	0.1498E-00	0.1078E-01	0.9713E 00
0.0176	0.3450E-00	0.2829E 01	0.5802E 00	0.8771E 00	0.3435E-00	0.1993E-00	0.1613E-01	0.9713E 00
0.0235	0.3925E-00	0.2592E 01	0.6319E 00	0.8747E 00	0.3749E-00	0.2369E-00	0.2171E-01	0.9713E 00
0.0294	0.4238E-00	0.2443E 01	0.6624E 00	0.8734E 00	0.3978E-00	0.2635E-00	0.2656E-01	0.9713E 00
0.0353	0.4452E-00	0.2348E 01	0.6821E 00	0.8736E 00	0.4138E-00	0.2823E-00	0.3053E-01	0.9713E 00
0.0412	0.4605E-00	0.2284E 01	0.6960E 00	0.8746E 00	0.4254E-00	0.2961E-00	0.3377E-01	0.9713E 00
0.0471	0.4741E-00	0.2233E 01	0.7085E 00	0.8773E 00	0.4351E-00	0.3083E-00	0.3695E-01	0.9713E 00
0.0529	0.4850E-00	0.2194E 01	0.7183E 00	0.8798E 00	0.4429E-00	0.3181E-00	0.3970E-01	0.9713E 00
0.0588	0.4956E-00	0.2158E 01	0.7279E 00	0.8828E 00	0.4503E-00	0.3278E-00	0.4259E-01	0.9713E 00
0.0882	0.5401E 00	0.2022E 01	0.7680E 00	0.9005E 00	0.4805E-00	0.3690E-00	0.5727E-01	0.9713E 00
0.1176	0.5772E 00	0.1924E 01	0.8007E 00	0.9194E 00	0.5049E 00	0.4043E-00	0.7328E-01	0.9713E 00
0.1471	0.6093E 00	0.1841E 01	0.8265E 00	0.9341E 00	0.5279E 00	0.4363E-00	0.9054E-01	0.9713E 00
0.1765	0.6370E 00	0.1768E 01	0.8469E 00	0.9451E 00	0.5496E 00	0.4654E-00	0.1086E-00	0.9713E 00
0.2059	0.6626E 00	0.1700E 01	0.8639E 00	0.9531E 00	0.5716E 00	0.4938E-00	0.1283E-00	0.9713E 00
0.2353	0.6848E 00	0.1642E 01	0.8775E 00	0.9592E 00	0.5917E 00	0.5192E 00	0.1481E-00	0.9713E 00
0.2647	0.7053E 00	0.1589E 01	0.8889E 00	0.9633E 00	0.6119E 00	0.5440E 00	0.1689E-00	0.9718E 00
0.2941	0.7229E 00	0.1544E 01	0.8981E 00	0.9664E 00	0.6300E 00	0.5658E 00	0.1889E-00	0.9722E 00
0.3235	0.7398E 00	0.1501E 01	0.9064E 00	0.9689E 00	0.6484E 00	0.5877E 00	0.2104E-00	0.9731E 00
0.3529	0.7563E 00	0.1461E 01	0.9142E 00	0.9714E 00	0.6668E 00	0.6096E 00	0.2335E-00	0.9740E 00
0.3824	0.7710E 00	0.1427E 01	0.9208E 00	0.9735E 00	0.6835E 00	0.6294E 00	0.2560E-00	0.9749E 00
0.4118	0.7868E 00	0.1391E 01	0.9278E 00	0.9757E 00	0.7019E 00	0.6512E 00	0.2824E-00	0.9758E 00
0.4412	0.8015E 00	0.1358E 01	0.9340E 00	0.9776E 00	0.7194E 00	0.6719E 00	0.3094E-00	0.9767E 00
0.4706	0.8158E 00	0.1327E 01	0.9398E 00	0.9795E 00	0.7371E 00	0.6927E 00	0.3379E-00	0.9780E 00
0.5000	0.8297E 00	0.1298E 01	0.9453E 00	0.9813E 00	0.7547E 00	0.7134E 00	0.3682E-00	0.9794E 00
0.5294	0.8426E 00	0.1272E 01	0.9502E 00	0.9829E 00	0.7716E 00	0.7332E 00	0.3984E-00	0.9812E 00
0.5588	0.8558E 00	0.1246E 01	0.9551E 00	0.9846E 00	0.7894E 00	0.7539E 00	0.4319E-00	0.9830E 00
0.5882	0.8695E 00	0.1219E 01	0.9601E 00	0.9862E 00	0.8079E 00	0.7756E 00	0.4691E-00	0.9848E 00
0.6176	0.8842E 00	0.1192E 01	0.9652E 00	0.9879E 00	0.8281E 00	0.7993E 00	0.5122E 00	0.9866E 00
0.6471	0.8988E 00	0.1165E 01	0.9701E 00	0.9896E 00	0.8482E 00	0.8228E 00	0.5584E 00	0.9879E 00
0.6765	0.9137E 00	0.1139E 01	0.9749E 00	0.9912E 00	0.8691E 00	0.8473E 00	0.6096E 00	0.9892E 00
0.7059	0.9275E 00	0.1115E 01	0.9793E 00	0.9927E 00	0.8893E 00	0.8709E 00	0.6611E 00	0.9910E 00
0.7353	0.9417E 00	0.1091E 01	0.9836E 00	0.9942E 00	0.9103E 00	0.8954E 00	0.7179E 00	0.9928E 00
0.7647	0.9533E 00	0.1072E 01	0.9870E 00	0.9954E 00	0.9280E 00	0.9160E 00	0.7678E 00	0.9946E 00
0.7941	0.9646E 00	0.1054E 01	0.9903E 00	0.9965E 00	0.9447E 00	0.9355E 00	0.8185E 00	0.9955E 00
0.8235	0.9751E 00	0.1038E 01	0.9932E 00	0.9976E 00	0.9606E 00	0.9541E 00	0.8688E 00	0.9964E 00
0.8529	0.9835E 00	0.1025E 01	0.9955E 00	0.9984E 00	0.9736E 00	0.9692E 00	0.9111E 00	0.9973E 00
0.8824	0.9893E 00	0.1016E 01	0.9971E 00	0.9989E 00	0.9828E 00	0.9800E 00	0.9416E 00	0.9982E 00
0.9118	0.9936E 00	0.1010E 01	0.9983E 00	0.9993E 00	0.9895E 00	0.9878E 00	0.9645E 00	0.9987E 00
0.9412	0.9970E 00	0.1005E 01	0.9992E 00	0.9997E 00	0.9950E 00	0.9942E 00	0.9833E 00	0.9991E 00
0.9706	0.9990E 00	0.1002E 01	0.9997E 00	0.9998E 00	0.9984E 00	0.9981E 00	0.9946E 00	0.9996E 00
1.0000	0.9999E 00	0.1000E 01	0.9999E 00	0.9999E 00	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01

TABLE VII - PROFILES OF VELOCITY, TEMPERATURE, AND PRESSURE FOR THE CONVEX CENTER SECTION WITH A COOLED WALL.

(a) M_∞ = 1.61 STATION 6 T_w/T_δ = .9486

δ = 0.650 IN M_δ = 1.507 T_δ = 375.6 °R U_δ = 1431 FT/SEC T_{T_δ} = 546.2 °R

ρ_δ = 1.563 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 2.238 SLUGS/FT²-SEC P_δ = 1007.58 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.9487E 00	0.	0.6524E 00	0.1035E 01	0.	0.2649E-00	0.9820E 00
0.0077	0.6216E 00	0.1013E 01	0.6259E 00	0.8191E 00	0.9694E 00	0.6064E 00	0.4666E-00	0.9822E 00
0.0154	0.6583E 00	0.1056E 01	0.6766E 00	0.8690E 00	0.9304E 00	0.6292E 00	0.4970E-00	0.9823E 00
0.0231	0.6813E 00	0.1080E 01	0.7083E 00	0.8996E 00	0.9095E 00	0.6438E 00	0.5174E 00	0.9824E 00
0.0308	0.6985E 00	0.1091E 01	0.7299E 00	0.9168E 00	0.9005E 00	0.6568E 00	0.5338E 00	0.9826E 00
0.0385	0.7137E 00	0.1094E 01	0.7467E 00	0.9263E 00	0.8985E 00	0.6705E 00	0.5490E 00	0.9827E 00
0.0462	0.7269E 00	0.1093E 01	0.7603E 00	0.9323E 00	0.8991E 00	0.6832E 00	0.5627E 00	0.9828E 00
0.0538	0.7381E 00	0.1093E 01	0.7718E 00	0.9375E 00	0.8996E 00	0.6939E 00	0.5746E 00	0.9830E 00
0.0615	0.7481E 00	0.1092E 01	0.7821E 00	0.9420E 00	0.9003E 00	0.7037E 00	0.5857E 00	0.9831E 00
0.0692	0.7564E 00	0.1092E 01	0.7908E 00	0.9463E 00	0.9004E 00	0.7116E 00	0.5952E 00	0.9833E 00
0.0769	0.7639E 00	0.1092E 01	0.7983E 00	0.9495E 00	0.9011E 00	0.7189E 00	0.6038E 00	0.9834E 00
0.1154	0.7894E 00	0.1091E 01	0.8246E 00	0.9623E 00	0.9024E 00	0.7437E 00	0.6348E 00	0.9841E 00
0.1538	0.8090E 00	0.1089E 01	0.8446E 00	0.9718E 00	0.9041E 00	0.7632E 00	0.6603E 00	0.9848E 00
0.1923	0.8260E 00	0.1086E 01	0.8612E 00	0.9786E 00	0.9073E 00	0.7809E 00	0.6836E 00	0.9855E 00
0.2308	0.8418E 00	0.1082E 01	0.8758E 00	0.9833E 00	0.9118E 00	0.7981E 00	0.7062E 00	0.9862E 00
0.2692	0.8573E 00	0.1076E 01	0.8895E 00	0.9869E 00	0.9174E 00	0.8155E 00	0.7293E 00	0.9869E 00
0.3077	0.8721E 00	0.1069E 01	0.9020E 00	0.9892E 00	0.9238E 00	0.8328E 00	0.7523E 00	0.9876E 00
0.3462	0.8873E 00	0.1061E 01	0.9142E 00	0.9905E 00	0.9316E 00	0.8512E 00	0.7770E 00	0.9882E 00
0.3846	0.9011E 00	0.1054E 01	0.9252E 00	0.9917E 00	0.9389E 00	0.8681E 00	0.8002E 00	0.9889E 00
0.4231	0.9154E 00	0.1046E 01	0.9364E 00	0.9929E 00	0.9464E 00	0.8857E 00	0.8252E 00	0.9896E 00
0.4615	0.9301E 00	0.1038E 01	0.9478E 00	0.9941E 00	0.9544E 00	0.9040E 00	0.8519E 00	0.9903E 00
0.5000	0.9440E 00	0.1030E 01	0.9584E 00	0.9953E 00	0.9620E 00	0.9215E 00	0.8780E 00	0.9910E 00
0.5385	0.9566E 00	0.1023E 01	0.9681E 00	0.9963E 00	0.9691E 00	0.9376E 00	0.9028E 00	0.9917E 00
0.5769	0.9677E 00	0.1017E 01	0.9764E 00	0.9973E 00	0.9755E 00	0.9519E 00	0.9253E 00	0.9924E 00
0.6154	0.9770E 00	0.1012E 01	0.9833E 00	0.9980E 00	0.9811E 00	0.9641E 00	0.9446E 00	0.9931E 00
0.6538	0.9839E 00	0.1009E 01	0.9885E 00	0.9986E 00	0.9854E 00	0.9734E 00	0.9596E 00	0.9938E 00
0.6923	0.9888E 00	0.1006E 01	0.9921E 00	0.9990E 00	0.9887E 00	0.9803E 00	0.9706E 00	0.9945E 00
0.7308	0.9930E 00	0.1004E 01	0.9952E 00	0.9994E 00	0.9916E 00	0.9862E 00	0.9802E 00	0.9952E 00
0.7692	0.9952E 00	0.1003E 01	0.9968E 00	0.9996E 00	0.9935E 00	0.9897E 00	0.9857E 00	0.9959E 00
0.8077	0.9975E 00	0.1001E 01	0.9984E 00	0.9998E 00	0.9954E 00	0.9932E 00	0.9911E 00	0.9965E 00
0.8462	0.9985E 00	0.1001E 01	0.9992E 00	0.9999E 00	0.9966E 00	0.9952E 00	0.9940E 00	0.9972E 00
0.8846	0.9996E 00	0.1000E 01	1.0000E 00	1.0000E 00	0.9979E 00	0.9972E 00	0.9971E 00	0.9979E 00
0.9231	0.9998E 00	0.1000E 01	0.1000E 01	1.0000E 00	0.9987E 00	0.9982E 00	0.9983E 00	0.9986E 00
0.9615	0.9999E 00	0.1000E 01	0.1000E 01	1.0000E 00	0.9994E 00	0.9991E 00	0.9992E 00	0.9993E 00
1.0000	1.0000E 00	0.1000E 01	0.1000E 01	1.0000E 00	0.1000E 01	0.9998E 00	1.0000E 00	0.1000E 01

TABLE VII - CONTINUED.

(b) $M_\infty = 1.61$ STATION 8 $T_w/T_\delta = .8749$

$\delta = 0.550$ IN $M_\delta = 1.570$ $T_\delta = 367.9$ °R $U_\delta = 1476$ FT/SEC $T_{T_\delta} = 549.3$ °R

$\rho_\delta = 1.410 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.082$ SLUGS/FT²-SEC $P_\delta = 890.23$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.8749E 00	0.	0.5860E 00	0.1115E 01	0.	0.2399E-00	0.9757E 00
0.0091	0.6326E 00	0.9844E 00	0.6276E 00	0.7894E 00	0.9914E 00	0.6220E 00	0.4506E-00	0.9759E 00
0.0182	0.6920E 00	0.1039E 01	0.7052E 00	0.8601E 00	0.9396E 00	0.6624E 00	0.5036E 00	0.9761E 00
0.0273	0.7166E 00	0.1061E 0.	0.7382E 00	0.8907E 00	0.9201E 00	0.6789E 00	0.5286E 00	0.9763E 00
0.0364	0.7353E 00	0.1068E 01	0.7598E 00	0.9059E 00	0.9145E 00	0.6946E 00	0.5487E 00	0.9765E 00
0.0455	0.7490E 00	0.1070E 01	0.7746E 00	0.9146E 00	0.9132E 00	0.7071E 00	0.5642E 00	0.9768E 00
0.0545	0.7606E 00	0.1071E 01	0.7872E 00	0.9221E 00	0.9121E 00	0.7177E 00	0.5779E 00	0.9770E 00
0.0636	0.7700E 00	0.1072E 01	0.7972E 00	0.9278E 00	0.9117E 00	0.7265E 00	0.5892E 00	0.9772E 00
0.0727	0.7782E 00	0.1073E 01	0.8059E 00	0.9329E 00	0.9113E 00	0.7341E 00	0.5993E 00	0.9774E 00
0.0818	0.7850E 00	0.1073E 01	0.8131E 00	0.9369E 00	0.9113E 00	0.7407E 00	0.6081E 00	0.9776E 00
0.0909	0.7913E 00	0.1074E 01	0.8201E 00	0.9416E 00	0.9104E 00	0.7463E 00	0.6162E 00	0.9779E 00
0.1364	0.8179E 00	0.1075E 01	0.8480E 00	0.9575E 00	0.9107E 00	0.7720E 00	0.6525E 00	0.9790E 00
0.1818	0.8303E 00	0.1076E 01	0.8695E 00	0.9703E 00	0.9110E 00	0.7918E 00	0.6823E 00	0.9801E 00
0.2273	0.8541E 00	0.1075E 01	0.8855E 00	0.9789E 00	0.9129E 00	0.8080E 00	0.7068E 00	0.9812E 00
0.2727	0.8677E 00	0.1072E 01	0.8984E 00	0.9846E 00	0.9162E 00	0.8228E 00	0.7287E 00	0.9823E 00
0.3182	0.8806E 00	0.1067E 01	0.9097E 00	0.9880E 00	0.9216E 00	0.8380E 00	0.7506E 00	0.9834E 00
0.3636	0.8939E 00	0.1061E 01	0.9209E 00	0.9910E 00	0.9276E 00	0.8539E 00	0.7738E 00	0.9845E 00
0.4091	0.9057E 00	0.1055E 01	0.9300E 00	0.9920E 00	0.9346E 00	0.8688E 00	0.7951E 00	0.9856E 00
0.4545	0.9179E 00	0.1048E 01	0.9394E 00	0.9931E 00	0.9420E 00	0.8846E 00	0.8181E 00	0.9867E 00
0.5000	0.9292E 00	0.1041E 01	0.9480E 00	0.9940E 00	0.9490E 00	0.8992E 00	0.8399E 00	0.9878E 00
0.5455	0.9403E 00	0.1035E 01	0.9564E 00	0.9950E 00	0.9560E 00	0.9139E 00	0.8622E 00	0.9889E 00
0.5909	0.9509E 00	0.1028E 01	0.9642E 00	0.9959E 00	0.9627E 00	0.9279E 00	0.8841E 00	0.9901E 00
0.6364	0.9605E 00	0.1023E 01	0.9714E 00	0.9967E 00	0.9691E 00	0.9409E 00	0.9047E 00	0.9912E 00
0.6818	0.9699E 00	0.1017E 01	0.9783E 00	0.9975E 00	0.9753E 00	0.9537E 00	0.9254E 00	0.9923E 00
0.7273	0.9775E 00	0.1013E 01	0.9838E 00	0.9981E 00	0.9806E 00	0.9643E 00	0.9426E 00	0.9934E 00
0.7727	0.9845E 00	0.1009E 01	0.9888E 00	0.9987E 00	0.9856E 00	0.9743E 00	0.9590E 00	0.9945E 00
0.8182	0.9904E 00	0.1006E 01	0.9931E 00	0.9992E 00	0.9901E 00	0.9828E 00	0.9731E 00	0.9956E 00
0.8636	0.9944E 00	0.1003E 01	0.9960E 00	0.9996E 00	0.9935E 00	0.9890E 00	0.9833E 00	0.9967E 00
0.9091	0.9969E 00	0.1002E 01	0.9978E 00	0.9998E 00	0.9960E 00	0.9934E 00	0.9902E 00	0.9978E 00
0.9545	0.9989E 00	0.1001E 01	0.9992E 00	1.0000E 00	0.9982E 00	0.9970E 00	0.9957E 00	0.9989E 00
1.0000	0.1000E 01	1.0000E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01

TABLE VII - CONTINUED.

(c) M_∞ = 1.61 STATION 10 T_w/T_δ = .9831

δ = 0.600 IN M_δ = 1.633 T_δ = 355.1 °R U_δ = 1508 FT/SEC T_{T_δ} = 544.6 °R

ρ_δ = 1.341 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 2.022 SLUGS/FT²-SEC P_δ = 816.92 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.9831E 00	0.	0.6410E 00	0.9859E 00	0.	0.2171E-00	0.9695E 00
0.0083	0.6008E 00	0.1057E 01	0.6177E 00	0.8217E 00	0.9175E 00	0.5668E 00	0.4022E-00	0.9698E 00
0.0167	0.6438E 00	0.1090E 01	0.6723E 00	0.8680E 00	0.8896E 00	0.5981E 00	0.4368E-00	0.9700E 00
0.0250	0.6756E 00	0.1101E 01	0.7088E 00	0.8923E 00	0.8814E 00	0.6249E 00	0.4656E-00	0.9703E 00
0.0333	0.6972E 00	0.1100E 01	0.7315E 00	0.9035E 00	0.8818E 00	0.6451E 00	0.4868E-00	0.9705E 00
0.0417	0.7163E 00	0.1098E 01	0.7505E 00	0.9116E 00	0.8842E 00	0.6637E 00	0.5066E 00	0.9708E 00
0.0500	0.7329E 00	0.1095E 01	0.7672E 00	0.9190E 00	0.8862E 00	0.6800E 00	0.5250E 00	0.9710E 00
0.0583	0.7473E 00	0.1093E 01	0.7812E 00	0.9245E 00	0.8888E 00	0.6944E 00	0.5415E 00	0.9713E 00
0.0667	0.7591E 00	0.1091E 01	0.7931E 00	0.9303E 00	0.8900E 00	0.7060E 00	0.5556E 00	0.9716E 00
0.0750	0.7692E 00	0.1090E 01	0.8033E 00	0.9353E 00	0.8911E 00	0.7158E 00	0.5681E 00	0.9718E 00
0.0833	0.7781E 00	0.1089E 01	0.8120E 00	0.9392E 00	0.8926E 00	0.7249E 00	0.5795E 00	0.9721E 00
0.1250	0.8098E 00	0.1086E 01	0.8441E 00	0.9560E 00	0.8958E 00	0.7562E 00	0.6225E 00	0.9733E 00
0.1667	0.8306E 00	0.1084E 01	0.8650E 00	0.9671E 00	0.8986E 00	0.7774E 00	0.6532E 00	0.9746E 00
0.2083	0.8495E 00	0.1082E 01	0.8837E 00	0.9770E 00	0.9017E 00	0.7969E 00	0.6828E 00	0.9759E 00
0.2500	0.8666E 00	0.1077E 01	0.8993E 00	0.9833E 00	0.9072E 00	0.8160E 00	0.7111E 00	0.9771E 00
0.2917	0.8759E 00	0.1071E 01	0.9108E 00	0.9869E 00	0.9131E 00	0.8318E 00	0.7344E 00	0.9784E 00
0.3333	0.8930E 00	0.1065E 01	0.9218E 00	0.9900E 00	0.9195E 00	0.8476E 00	0.7582E 00	0.9797E 00
0.3750	0.9052E 00	0.1058E 01	0.9311E 00	0.9911E 00	0.9271E 00	0.8633E 00	0.7811E 00	0.9810E 00
0.4167	0.9171E 00	0.1051E 01	0.9400E 00	0.9922E 00	0.9347E 00	0.8788E 00	0.8044E 00	0.9822E 00
0.4583	0.9280E 00	0.1044E 01	0.9483E 00	0.9932E 00	0.9420E 00	0.8933E 00	0.8266E 00	0.9835E 00
0.5000	0.9385E 00	0.1037E 01	0.9560E 00	0.9942E 00	0.9490E 00	0.9073E 00	0.8486E 00	0.9848E 00
0.5417	0.9484E 00	0.1031E 01	0.9633E 00	0.9951E 00	0.9558E 00	0.9208E 00	0.8701E 00	0.9860E 00
0.5833	0.9575E 00	0.1026E 01	0.9699E 00	0.9960E 00	0.9622E 00	0.9333E 00	0.8903E 00	0.9873E 00
0.6250	0.9658E 00	0.1021E 01	0.9759E 00	0.9967E 00	0.9682E 00	0.9449E 00	0.9094E 00	0.9886E 00
0.6667	0.9737E 00	0.1016E 01	0.9816E 00	0.9975E 00	0.9740E 00	0.9562E 00	0.9282E 00	0.9899E 00
0.7083	0.9808E 00	0.1012E 01	0.9866E 00	0.9981E 00	0.9794E 00	0.9664E 00	0.9453E 00	0.9911E 00
0.7500	0.9858E 00	0.1009E 01	0.9902E 00	0.9986E 00	0.9836E 00	0.9741E 00	0.9583E 00	0.9924E 00
0.7917	0.9893E 00	0.1007E 01	0.9927E 00	0.9989E 00	0.9870E 00	0.9798E 00	0.9677E 00	0.9937E 00
0.8333	0.9928E 00	0.1004E 01	0.9951E 00	0.9992E 00	0.9903E 00	0.9855E 00	0.9770E 00	0.9949E 00
0.8750	0.9950E 00	0.1003E 01	0.9967E 00	0.9994E 00	0.9929E 00	0.9897E 00	0.9836E 00	0.9962E 00
0.9167	0.9970E 00	0.1002E 01	0.9980E 00	0.9996E 00	0.9953E 00	0.9934E 00	0.9895E 00	0.9975E 00
0.9583	0.9992E 00	0.1001E 01	0.9996E 00	0.9998E 00	0.9979E 00	0.9976E 00	0.9961E 00	0.9987E 00
1.0000	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.9997E 00	0.1000E 01	0.9996E 00	0.1000E 01

TABLE VII - CONTINUED.

(d) $M_\infty = 1.61$ STATION 12 $T_w/T_\delta = 1.161$

$\delta = 0.625$ IN $M_\delta = 1.662$ $T_\delta = 352.5$ °R $U_\delta = 1530$ FT/SEC $T_{T_\delta} = 547.3$ °R

$\rho_\delta = 1.310 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 2.004$ SLUGS/FT²-SEC $P_\delta = 792.46$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1162E 01	0.	0.7481E 00	0.8442E 00	0.	0.2103E-00	0.9805E 00
0.0080	0.5561E 00	0.1186E 01	0.6053E 00	0.8941E 00	0.8272E 00	0.5007E 00	0.3653E-00	0.9806E 00
0.0160	0.6183E 00	0.1191E 01	0.6745E 00	0.9291E 00	0.8236E 00	0.5556E 00	0.4112E-00	0.9808E 00
0.0240	0.6552E 00	0.1186E 01	0.7131E 00	0.9446E 00	0.8275E 00	0.5902E 00	0.4429E-00	0.9809E 00
0.0320	0.6836E 00	0.1175E 01	0.7407E 00	0.9524E 00	0.8348E 00	0.6185E 00	0.4699E-00	0.9811E 00
0.0400	0.7048E 00	0.1165E 01	0.7603E 00	0.9559E 00	0.8427E 00	0.6407E 00	0.4916E-00	0.9813E 00
0.0480	0.7225E 00	0.1156E 01	0.7763E 00	0.9589E 00	0.8494E 00	0.6595E 00	0.5107E 00	0.9814E 00
0.0560	0.7366E 00	0.1149E 01	0.7891E 00	0.9615E 00	0.8546E 00	0.6745E 00	0.5268E 00	0.9816E 00
0.0640	0.7485E 00	0.1143E 01	0.7998E 00	0.9638E 00	0.8592E 00	0.6872E 00	0.5409E 00	0.9817E 00
0.0720	0.7594E 00	0.1137E 01	0.8095E 00	0.9660E 00	0.8633E 00	0.6990E 00	0.5543E 00	0.9819E 00
0.0800	0.7693E 00	0.1132E 01	0.8183E 00	0.9678E 00	0.8673E 00	0.7098E 00	0.5667E 00	0.9820E 00
0.1200	0.8036E 00	0.1116E 01	0.8486E 00	0.9754E 00	0.8806E 00	0.7474E 00	0.6131E 00	0.9828E 00
0.1600	0.8266E 00	0.1105E 01	0.8686E 00	0.9805E 00	0.8901E 00	0.7732E 00	0.6469E 00	0.9836E 00
0.2000	0.8460E 00	0.1095E 01	0.8848E 00	0.9840E 00	0.8992E 00	0.7957E 00	0.6774E 00	0.9844E 00
0.2400	0.8634E 00	0.1085E 01	0.8991E 00	0.9868E 00	0.9079E 00	0.8164E 00	0.7064E 00	0.9852E 00
0.2800	0.8784E 00	0.1077E 01	0.9110E 00	0.9889E 00	0.9159E 00	0.8345E 00	0.7325E 00	0.9859E 00
0.3200	0.8915E 00	0.1068E 01	0.9210E 00	0.9903E 00	0.9236E 00	0.8508E 00	0.7563E 00	0.9867E 00
0.3600	0.9032E 00	0.1061E 01	0.9299E 00	0.9913E 00	0.9308E 00	0.8657E 00	0.7785E 00	0.9875E 00
0.4000	0.9143E 00	0.1054E 01	0.9382E 00	0.9923E 00	0.9378E 00	0.8800E 00	0.8004E 00	0.9883E 00
0.4400	0.9253E 00	0.1047E 01	0.9464E 00	0.9933E 00	0.9448E 00	0.8943E 00	0.8227E 00	0.9891E 00
0.4800	0.9351E 00	0.1041E 01	0.9536E 00	0.9942E 00	0.9511E 00	0.9071E 00	0.8432E 00	0.9898E 00
0.5200	0.9447E 00	0.1035E 01	0.9606E 00	0.9950E 00	0.9575E 00	0.9198E 00	0.8639E 00	0.9906E 00
0.5600	0.9535E 00	0.1029E 01	0.9669E 00	0.9958E 00	0.9634E 00	0.9317E 00	0.8835E 00	0.9914E 00
0.6000	0.9615E 00	0.1024E 01	0.9726E 00	0.9965E 00	0.9689E 00	0.9425E 00	0.9018E 00	0.9922E 00
0.6400	0.9688E 00	0.1020E 01	0.9778E 00	0.9972E 00	0.9740E 00	0.9525E 00	0.9187E 00	0.9930E 00
0.6800	0.9760E 00	0.1015E 01	0.9829E 00	0.9978E 00	0.9791E 00	0.9625E 00	0.9359E 00	0.9938E 00
0.7200	0.9817E 00	0.1011E 01	0.9869E 00	0.9983E 00	0.9833E 00	0.9706E 00	0.9500E 00	0.9945E 00
0.7600	0.9867E 00	0.1008E 01	0.9904E 00	0.9987E 00	0.9872E 00	0.9778E 00	0.9626E 00	0.9953E 00
0.8000	0.9903E 00	0.1006E 01	0.9929E 00	0.9991E 00	0.9902E 00	0.9833E 00	0.9721E 00	0.9961E 00
0.8400	0.9933E 00	0.1004E 01	0.9949E 00	0.9993E 00	0.9927E 00	0.9878E 00	0.9799E 00	0.9969E 00
0.8800	0.9958E 00	0.1003E 01	0.9967E 00	0.9996E 00	0.9951E 00	0.9920E 00	0.9870E 00	0.9977E 00
0.9200	0.9974E 00	0.1002E 01	0.9978E 00	0.9997E 00	0.9969E 00	0.9948E 00	0.9916E 00	0.9984E 00
0.9600	0.9989E 00	0.1001E 01	0.9988E 00	0.9998E 00	0.9986E 00	0.9976E 00	0.9962E 00	0.9992E 00
1.0000	0.1000E 01	0.9999E 00	0.9997E 00	0.9999E 00	0.1000E 01	1.0000E 00	0.1000E 01	1.0000E 00

TABLE VII - CONTINUED.

(e) $M_\infty = 2.58$ STATION 6 $T_w/T_\delta = 1.241$

$\delta = 0.800$ IN $M_\delta = 2.363$ $T_\delta = 261.9$ °R $U_\delta = 1874$ FT/SEC $T_{T_\delta} = 554.4$ °R

$\rho_\delta = 1.031 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.933$ SLUGS/FT²-SEC $P_\delta = 463.57$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1241E 01	0.	0.5862E 00	0.7417E 00	0.	0.6673E-01	0.9199E 00
0.0062	0.4875E-00	0.1297E 01	0.5553E 00	0.7755E 00	0.7098E 00	0.3940E-00	0.1521E-00	0.9204E 00
0.0125	0.5637E 00	0.1308E 01	0.6448E 00	0.8374E 00	0.7042E 00	0.4539E-00	0.1933E-00	0.9209E 00
0.0187	0.6052E 00	0.1298E 01	0.6894E 00	0.8637E 00	0.7104E 00	0.4896E-00	0.2218E-00	0.9214E 00
0.0250	0.6337E 00	0.1281E 01	0.7174E 00	0.8768E 00	0.7199E 00	0.5162E 00	0.2445E-00	0.9219E 00
0.0312	0.6539E 00	0.1268E 01	0.7364E 00	0.8852E 00	0.7277E 00	0.5356E 00	0.2622E-00	0.9224E 00
0.0375	0.6670E 00	0.1260E 01	0.7489E 00	0.8911E 00	0.7327E 00	0.5485E 00	0.2746E-00	0.9229E 00
0.0437	0.6775E 00	0.1254E 01	0.7589E 00	0.8963E 00	0.7365E 00	0.5587E 00	0.2850E-00	0.9234E 00
0.0500	0.6864E 00	0.1249E 01	0.7672E 00	0.9006E 00	0.7400E 00	0.5675E 00	0.2942E-00	0.9239E 00
0.0562	0.6947E 00	0.1244E 01	0.7750E 00	0.9045E 00	0.7434E 00	0.5759E 00	0.3031E-00	0.9244E 00
0.0625	0.7008E 00	0.1241E 01	0.7807E 00	0.9076E 00	0.7459E 00	0.5820E 00	0.3099E-00	0.9249E 00
0.0937	0.7303E 00	0.1222E 01	0.8074E 00	0.9210E 00	0.7594E 00	0.6129E 00	0.3452E-00	0.9274E 00
0.1250	0.7527E 00	0.1206E 01	0.8267E 00	0.9301E 00	0.7715E 00	0.6375E 00	0.3751E-00	0.9299E 00
0.1562	0.7722E 00	0.1192E 01	0.8431E 00	0.9379E 00	0.7828E 00	0.6597E 00	0.4036E-00	0.9324E 00
0.1875	0.7898E 00	0.1179E 01	0.8576E 00	0.9449E 00	0.7934E 00	0.6801E 00	0.4313E-00	0.9349E 00
0.2187	0.8062E 00	0.1167E 01	0.8709E 00	0.9512E 00	0.8039E 00	0.6998E 00	0.4591E-00	0.9374E 00
0.2500	0.8235E 00	0.1153E 01	0.8845E 00	0.9575E 00	0.8153E 00	0.7208E 00	0.4903E-00	0.9399E 00
0.2812	0.8377E 00	0.1143E 01	0.8957E 00	0.9631E 00	0.8250E 00	0.7386E 00	0.5180E 00	0.9425E 00
0.3125	0.8517E 00	0.1133E 01	0.9066E 00	0.9687E 00	0.8345E 00	0.7562E 00	0.5467E 00	0.9450E 00
0.3437	0.8653E 00	0.1122E 01	0.9168E 00	0.9734E 00	0.8447E 00	0.7740E 00	0.5764E 00	0.9475E 00
0.3750	0.8761E 00	0.1111E 01	0.9258E 00	0.9772E 00	0.8551E 00	0.7913E 00	0.6058E 00	0.9500E 00
0.4062	0.8894E 00	0.1102E 01	0.9337E 00	0.9804E 00	0.8648E 00	0.8071E 00	0.6333E 00	0.9525E 00
0.4375	0.9011E 00	0.1092E 01	0.9416E 00	0.9834E 00	0.8751E 00	0.8237E 00	0.6630E 00	0.9550E 00
0.4687	0.9126E 00	0.1081E 01	0.9491E 00	0.9859E 00	0.8859E 00	0.8403E 00	0.6935E 00	0.9575E 00
0.5000	0.9227E 00	0.1072E 01	0.9555E 00	0.9881E 00	0.8958E 00	0.8555E 00	0.7219E 00	0.9600E 00
0.5312	0.9316E 00	0.1064E 01	0.9611E 00	0.9899E 00	0.9049E 00	0.8693E 00	0.7479E 00	0.9625E 00
0.5625	0.9397E 00	0.1057E 01	0.9661E 00	0.9914E 00	0.9138E 00	0.8823E 00	0.7728E 00	0.9650E 00
0.5937	0.9439E 00	0.1048E 01	0.9715E 00	0.9929E 00	0.9236E 00	0.8969E 00	0.8015E 00	0.9675E 00
0.6250	0.9574E 00	0.1040E 01	0.9765E 00	0.9942E 00	0.9331E 00	0.9107E 00	0.8292E 00	0.9700E 00
0.6562	0.9636E 00	0.1034E 01	0.9801E 00	0.9952E 00	0.9407E 00	0.9215E 00	0.8507E 00	0.9725E 00
0.6875	0.9697E 00	0.1029E 01	0.9836E 00	0.9961E 00	0.9484E 00	0.9324E 00	0.8725E 00	0.9750E 00
0.7187	0.9763E 00	0.1022E 01	0.9873E 00	0.9971E 00	0.9566E 00	0.9440E 00	0.8963E 00	0.9775E 00
0.7500	0.9818E 00	0.1017E 01	0.9903E 00	0.9978E 00	0.9639E 00	0.9541E 00	0.9170E 00	0.9800E 00
0.7812	0.9867E 00	0.1012E 01	0.9930E 00	0.9983E 00	0.9709E 00	0.9636E 00	0.9361E 00	0.9825E 00
0.8125	0.9895E 00	0.1010E 01	0.9945E 00	0.9987E 00	0.9759E 00	0.9700E 00	0.9482E 00	0.9850E 00
0.8437	0.9923E 00	0.1007E 01	0.9960E 00	0.9990E 00	0.9809E 00	0.9765E 00	0.9604E 00	0.9875E 00
0.8750	0.9942E 00	0.1005E 01	0.9970E 00	0.9992E 00	0.9852E 00	0.9817E 00	0.9697E 00	0.9900E 00
0.9062	0.9957E 00	0.1004E 01	0.9978E 00	0.9994E 00	0.9890E 00	0.9864E 00	0.9776E 00	0.9925E 00
0.9375	0.9969E 00	0.1003E 01	0.9985E 00	0.9996E 00	0.9927E 00	0.9907E 00	0.9845E 00	0.9950E 00
0.9687	0.9991E 00	0.1001E 01	0.9996E 00	0.9998E 00	0.9972E 00	0.9964E 00	0.9950E 00	0.9975E 00
1.0000	0.9998E 00	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	0.9999E 00	1.0000E 00	0.1000E 01

TABLE VII - CONTINUED.

(f) M_∞ = 2.58 STATION 8 T_w/T_δ = 1.225
δ = 0.825 IN M_δ = 2.518 T_δ = 247.4 °R U_δ = 1941 FT/SEC T_{T_δ} = 561.1 °R
ρ_δ = .9180 $\times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta$ = 1.782 SLUGS/FT² - SEC P_δ = 389.75 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1223E 01	0.	0.5403E 00	0.7906E 00	0.	0.5518E-01	0.9686E 00
0.0061	0.4606E-00	0.1202E 01	0.5049E 00	0.6723E 00	0.7741E 00	0.3908E-00	0.1219E-00	0.9300E 00
0.0121	0.5269E 00	0.1190E 01	0.5749E 00	0.7097E 00	0.7817E 00	0.4493E-00	0.1523E-00	0.9305E 00
0.0182	0.5642E 00	0.1184E 01	0.6139E 00	0.7326E 00	0.7865E 00	0.4828E-00	0.1737E-00	0.9309E 00
0.0242	0.5921E 00	0.1177E 01	0.6423E 00	0.7495E 00	0.7915E 00	0.5084E 00	0.1922E-00	0.9313E 00
0.0303	0.6143E 00	0.1169E 01	0.6643E 00	0.7622E 00	0.7970E 00	0.5294E 00	0.2086E-00	0.9318E 00
0.0364	0.6319E 00	0.1164E 01	0.6819E 00	0.7733E 00	0.8006E 00	0.5459E 00	0.2227E-00	0.9322E 00
0.0424	0.6461E 00	0.1162E 01	0.6964E 00	0.7835E 00	0.8028E 00	0.5590E 00	0.2349E-00	0.9326E 00
0.0485	0.6586E 00	0.1160E 01	0.7094E 00	0.7930E 00	0.8042E 00	0.5704E 00	0.2463E-00	0.9330E 00
0.0545	0.6687E 00	0.1157E 01	0.7195E 00	0.7997E 00	0.8066E 00	0.5802E 00	0.2561E-00	0.9335E 00
0.0606	0.6775E 00	0.1156E 01	0.7284E 00	0.8061E 00	0.8083E 00	0.5886E 00	0.2649E-00	0.9339E 00
0.0909	0.7098E 00	0.1158E 01	0.7638E 00	0.8367E 00	0.8085E 00	0.6174E 00	0.3004E-00	0.9360E 00
0.1212	0.7325E 00	0.1161E 01	0.7893E 00	0.8603E 00	0.8080E 00	0.6377E 00	0.3286E-00	0.9381E 00
0.1515	0.7506E 00	0.1167E 01	0.8107E 00	0.8818E 00	0.8061E 00	0.6535E 00	0.3534E-00	0.9403E 00
0.1818	0.7661E 00	0.1166E 01	0.8273E 00	0.8967E 00	0.8084E 00	0.6687E 00	0.3762E-00	0.9424E 00
0.2121	0.7803E 00	0.1160E 01	0.8406E 00	0.9066E 00	0.8141E 00	0.6842E 00	0.3985E-00	0.9445E 00
0.2424	0.[illegible]764E 00	0.1153E 01	0.8553E 00	0.9176E 00	0.8208E 00	0.7020E 00	0.4254E-00	0.9467E 00
0.2727	0.8107E 00	0.1146E 01	0.8677E 00	0.9261E 00	0.8283E 00	0.7187E 00	0.4509E-00	0.9488E 00
0.3030	0.8260E 00	0.1136E 01	0.8806E 00	0.9346E 00	0.8369E 00	0.7369E 00	0.4800E-00	0.9509E 00
0.3333	0.8397E 00	0.1126E 01	0.8912E 00	0.9408E 00	0.8461E 00	0.7540E 00	0.5076E 00	0.9531E 00
0.3636	0.8537E 00	0.1117E 01	0.9022E 00	0.9475E 00	0.8554E 00	0.7717E 00	0.5377E 00	0.9552E 00
0.3939	0.8677E 00	0.1107E 01	0.9129E 00	0.9540E 00	0.8650E 00	0.7896E 00	0.5694E 00	0.9573E 00
0.4242	0.8828E 00	0.1096E 01	0.9241E 00	0.9605E 00	0.8758E 00	0.8092E 00	0.6056E 00	0.9595E 00
0.4545	0.8978E 00	0.1084E 01	0.9347E 00	0.9663E 00	0.8873E 00	0.8293E 00	0.6440E 00	0.9616E 00
0.4848	0.9113E 00	0.1073E 01	0.9440E 00	0.9713E 00	0.8982E 00	0.8478E 00	0.6806E 00	0.9637E 00
0.5152	0.9233E 00	0.1064E 01	0.9523E 00	0.9761E 00	0.9081E 00	0.8647E 00	0.7153E 00	0.9659E 00
0.5455	0.9340E 00	0.1055E 01	0.9594E 00	0.9798E 00	0.9175E 00	0.8802E 00	0.7476E 00	0.9680E 00
0.5758	0.9445E 00	0.1046E 01	0.9661E 00	0.9831E 00	0.9274E 00	0.8959E 00	0.7809E 00	0.9701E 00
0.6061	0.9528E 00	0.1040E 01	0.9715E 00	0.9861E 00	0.9352E 00	0.9085E 00	0.8085E 00	0.9723E 00
0.6364	0.9599E 00	0.1034E 01	0.9763E 00	0.9890E 00	0.9421E 00	0.9198E 00	0.8334E 00	0.9744E 00
0.6667	0.9684E 00	0.1027E 01	0.9814E 00	0.9914E 00	0.9509E 00	0.9331E 00	0.8633E 00	0.9765E 00
0.6970	0.9739E 00	0.1022E 01	0.9848E 00	0.9931E 00	0.9573E 00	0.9426E 00	0.8843E 00	0.9787E 00
0.7273	0.9805E 00	0.1017E 01	0.9890E 00	0.9954E 00	0.9642E 00	0.9535E 00	0.9094E 00	0.9808E 00
0.7576	0.9856E 00	0.1013E 01	0.9921E 00	0.9970E 00	0.9703E 00	0.9625E 00	0.9298E 00	0.9829E 00
0.7879	0.9897E 00	0.1009E 01	0.9944E 00	0.9979E 00	0.9759E 00	0.9704E 00	0.9468E 00	0.9851E 00
0.8182	0.9918E 00	0.1008E 01	0.9957E 00	0.9986E 00	0.9797E 00	0.9753E 00	0.9567E 00	0.9872E 00
0.8485	0.9944E 00	0.1005E 01	0.9971E 00	0.9991E 00	0.9842E 00	0.9812E 00	0.9687E 00	0.9893E 00
0.8788	0.9965E 00	0.1003E 01	0.9982E 00	0.9994E 00	0.9883E 00	0.9864E 00	0.9787E 00	0.9915E 00
0.9091	0.9980E 00	0.1002E 01	0.9989E 00	0.9996E 00	0.9919E 00	0.9908E 00	0.9867E 00	0.9936E 00
0.9394	0.9990E 00	0.1001E 01	0.9995E 00	0.9998E 00	0.9950E 00	0.9943E 00	0.9927E 00	0.9957E 00
0.9697	0.9995E 00	0.1000E 01	0.9997E 00	0.9999E 00	0.9975E 00	0.9971E 00	0.9966E 00	0.9979E 00
1.0000	0.9999E 00	0.1000E 01	1.0000E 00	1.0000E 00	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01

TABLE VII - CONTINUED.

(B) $M_\infty = 2.58$ STATION 10 $T_w/T_\delta = 1.405$

$\delta = 0.900$ IN $M_\delta = 2.529$ $T_\delta = 247.3$ °R $U_\delta = 1949$ FT/SEC $T_{T_\delta} = 563.8$ °R

$\rho_\delta = 0.8772 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.710$ SLUGS/FT²-SEC $P_\delta = 372.29$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1406E 01	0.	0.6166E 00	0.6303E 00	0.	0.4955E-01	0.8859E 00
0.0056	0.4874E-00	0.1372E 01	0.5709E 00	0.7846E 00	0.6463E 00	0.3689E-00	0.1255E-00	0.8865E 00
0.0111	0.5638E 00	0.1353E 01	0.6558E 00	0.8345E 00	0.6560E 00	0.4301E-00	0.1637E-00	0.8871E 00
0.0167	0.5910E 00	0.1341E 01	0.6844E 00	0.8511E 00	0.6620E 00	0.4530E-00	0.1808E-00	0.8878E 00
0.0222	0.6092E 00	0.1333E 01	0.7034E 00	0.8622E 00	0.6666E 00	0.4687E-00	0.1935E-00	0.8884E 00
0.0278	0.6240E 00	0.1326E 01	0.7184E 00	0.8710E 00	0.6708E 00	0.4818E-00	0.2045E-00	0.8890E 00
0.0333	0.6360E 00	0.1318E 01	0.7303E 00	0.8775E 00	0.6749E 00	0.4928E-00	0.2141E-00	0.8897E 00
0.0389	0.6469E 00	0.1312E 01	0.7409E 00	0.8834E 00	0.6788E 00	0.5028E 00	0.2232E-00	0.8903E 00
0.0444	0.6566E 00	0.1306E 01	0.7503E 00	0.8885E 00	0.6824E 00	0.5119E 00	0.2317E-00	0.8909E 00
0.0500	0.6653E 00	0.1300E 01	0.7587E 00	0.8932E 00	0.6858E 00	0.5202E 00	0.2397E-00	0.8916E 00
0.0556	0.6732E 00	0.1295E 01	0.7663E 00	0.8975E 00	0.6889E 00	0.5278E 00	0.2472E-00	0.8922E 00
0.0833	0.7065E 00	0.1273E 01	0.7973E 00	0.9152E 00	0.7032E 00	0.5606E 00	0.2819E-00	0.8954E 00
0.1111	0.7318E 00	0.1258E 01	0.8208E 00	0.9297E 00	0.7144E 00	0.5863E 00	0.3121E-00	0.8985E 00
0.1389	0.7535E 00	0.1244E 01	0.8403E 00	0.9416E 00	0.7252E 00	0.6093E 00	0.3408E-00	0.9017E 00
0.1667	0.7711E 00	0.1230E 01	0.8553E 00	0.9501E 00	0.7356E 00	0.6291E 00	0.3664E-00	0.9049E 00
0.1944	0.7861E 00	0.1219E 01	0.8680E 00	0.9573E 00	0.7451E 00	0.6466E 00	0.3901E-00	0.9081E 00
0.2222	0.7994E 00	0.1208E 01	0.8788E 00	0.9632E 00	0.7543E 00	0.6627E 00	0.4125E-00	0.9112E 00
0.2500	0.8136E 00	0.1196E 01	0.8899E 00	0.9689E 00	0.7645E 00	0.6802E 00	0.4377E-00	0.9144E 00
0.2778	0.8267E 00	0.1184E 01	0.8996E 00	0.9732E 00	0.7752E 00	0.6972E 00	0.4625E-00	0.9176E 00
0.3056	0.8381E 00	0.1172E 01	0.9076E 00	0.9763E 00	0.7854E 00	0.7127E 00	0.4855E-00	0.9207E 00
0.3333	0.8506E 00	0.1160E 01	0.9161E 00	0.9794E 00	0.7969E 00	0.7298E 00	0.5119E 00	0.9239E 00
0.3611	0.8629E 00	0.1146E 01	0.9240E 00	0.9819E 00	0.8087E 00	0.7472E 00	0.5393E 00	0.9271E 00
0.3889	0.8763E 00	0.1132E 01	0.9324E 00	0.9842E 00	0.8219E 00	0.7662E 00	0.5705E 00	0.9302E 00
0.4167	0.8887E 00	0.1119E 01	0.9400E 00	0.9864E 00	0.8345E 00	0.7843E 00	0.6013E 00	0.9334E 00
0.4444	0.9009E 00	0.1105E 01	0.9472E 00	0.9881E 00	0.8475E 00	0.8026E 00	0.6331E 00	0.9366E 00
0.4722	0.9134E 00	0.1091E 01	0.9544E 00	0.9897E 00	0.8611E 00	0.8217E 00	0.6677E 00	0.9398E 00
0.5000	0.9245E 00	0.1079E 01	0.9605E 00	0.9910E 00	0.8737E 00	0.8391E 00	0.6998E 00	0.9429E 00
0.5278	0.9354E 00	0.1068E 01	0.9665E 00	0.9923E 00	0.8863E 00	0.8565E 00	0.7330E 00	0.9461E 00
0.5556	0.9460E 00	0.1056E 01	0.9723E 00	0.9935E 00	0.8989E 00	0.8738E 00	0.7670E 00	0.9493E 00
0.5833	0.9552E 00	0.1046E 01	0.9772E 00	0.9946E 00	0.9104E 00	0.8895E 00	0.7982E 00	0.9524E 00
0.6111	0.9637E 00	0.1037E 01	0.9816E 00	0.9956E 00	0.9214E 00	0.9043E 00	0.8282E 00	0.9556E 00
0.6389	0.9709E 00	0.1030E 01	0.9854E 00	0.9964E 00	0.9312E 00	0.9174E 00	0.8548E 00	0.9588E 00
0.6667	0.9774E 00	0.1023E 01	0.9887E 00	0.9971E 00	0.9404E 00	0.9296E 00	0.8799E 00	0.9620E 00
0.6944	0.9839E 00	0.1016E 01	0.9920E 00	0.9979E 00	0.9497E 00	0.9418E 00	0.9054E 00	0.9651E 00
0.7222	0.9873E 00	0.1013E 01	0.9937E 00	0.9983E 00	0.9561E 00	0.9499E 00	0.9209E 00	0.9683E 00
0.7500	0.9908E 00	0.1009E 01	0.9955E 00	0.9987E 00	0.9626E 00	0.9580E 00	0.9364E 00	0.9715E 00
0.7778	0.9936E 00	0.1007E 01	0.9969E 00	0.9990E 00	0.9685E 00	0.9653E 00	0.9500E 00	0.9746E 00
0.8056	0.9958E 00	0.1004E 01	0.9980E 00	0.9993E 00	0.9738E 00	0.9717E 00	0.9616E 00	0.9778E 00
0.8333	0.9975E 00	0.1003E 01	0.9989E 00	0.9995E 00	0.9786E 00	0.9773E 00	0.9710E 00	0.9810E 00
0.8611	0.9991E 00	0.1001E 01	0.9997E 00	0.9997E 00	0.9833E 00	0.9829E 00	0.9805E 00	0.9841E 00
0.8889	0.9997E 00	0.1000E 01	1.0000E 00	0.9998E 00	0.9870E 00	0.9868E 00	0.9857E 00	0.9873E 00
0.9167	0.1000E 01	0.9999E 00	0.1000E 01	0.9999E 00	0.9907E 00	0.9907E 00	0.9908E 00	0.9905E 00
0.9444	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.9938E 00	0.9938E 00	0.9939E 00	0.9937E 00
0.9722	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.9969E 00	0.9969E 00	0.9969E 00	0.9968E 00
1.0000	0.1000E 01	0.1000E 01	0.1000E 01	1.0000E 00	1.0000E 00	0.1000E 01	1.0000E 00	1.0000E 00

TABLE VII - CONTINUED.

(h) $M_\infty = 2.58$ STATION 14 $T_w/T_\delta = 1.403$

$\delta = 0.875$ IN $M_\delta = 2.635$ $T_\delta = 235.9$ °R $U_\delta = 1983$ FT/SEC $T_{T_\delta} = 563.5$ °R

$\rho_\delta = 0.7787 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.544$ SLUGS/FT²-SEC $P_\delta = 315.22$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1403E 01	0.	0.5874E 00	0.7033E 00	0.	0.4687E-01	0.9868E 00
0.0057	0.4725E-00	0.1471E 01	0.5732E 00	0.8067E 00	0.6709E 00	0.3846E-00	0.1206E-00	0.9868E 00
0.0114	0.5029E 00	0.1485E 01	0.6130E 00	0.8400E 00	0.6646E 00	0.4074E-00	0.1344E-00	0.9868E 00
0.0171	0.5280E 00	0.1473E 01	0.6411E 00	0.8556E 00	0.6698E 00	0.4294E-00	0.1473E-00	0.9868E 00
0.0229	0.5494E 00	0.1455E 01	0.6628E 00	0.8643E 00	0.6783E 00	0.4496E-00	0.1595E-00	0.9868E 00
0.0286	0.5677E 00	0.1439E 01	0.6811E 00	0.8718E 00	0.6859E 00	0.4672E-00	0.1710E-00	0.9868E 00
0.0343	0.5830E 00	0.1425E 01	0.6962E 00	0.8783E 00	0.6924E 00	0.4821E-00	0.1813E-00	0.9868E 00
0.0400	0.5965E 00	0.1413E 01	0.7093E 00	0.8838E 00	0.6984E 00	0.4954E-00	0.1910E-00	0.9868E 00
0.0457	0.6081E 00	0.1403E 01	0.7204E 00	0.8888E 00	0.7035E 00	0.5068E 00	0.1998E-00	0.9868E 00
0.0514	0.6189E 00	0.1393E 01	0.7306E 00	0.8934E 00	0.7084E 00	0.5176E 00	0.2084E-00	0.9868E 00
0.0571	0.6290E 00	0.1383E 01	0.7400E 00	0.8973E 00	0.7134E 00	0.5280E 00	0.2169E-00	0.9868E 00
0.0857	0.6611E 00	0.1356E 01	0.7701E 00	0.9125E 00	0.7275E 00	0.5604E 00	0.2465E-00	0.9868E 00
0.1143	0.6951E 00	0.1323E 01	0.7996E 00	0.9252E 00	0.7461E 00	0.5967E 00	0.2826E-00	0.9868E 00
0.1429	0.7242E 00	0.1293E 01	0.8237E 00	0.9357E 00	0.7631E 00	0.6287E 00	0.3180E-00	0.9868E 00
0.1714	0.7472E 00	0.1271E 01	0.8426E 00	0.9447E 00	0.7764E 00	0.6543E 00	0.3493E-00	0.9868E 00
0.2000	0.7680E 00	0.1251E 01	0.8592E 00	0.9526E 00	0.7888E 00	0.6778E 00	0.3804E-00	0.9868E 00
0.2286	0.7866E 00	0.1233E 01	0.8737E 00	0.9598E 00	0.8003E 00	0.6993E 00	0.4107E-00	0.9868E 00
0.2571	0.8034E 00	0.1217E 01	0.8865E 00	0.9660E 00	0.8109E 00	0.7189E 00	0.4399E-00	0.9868E 00
0.2857	0.8187E 00	0.1201E 01	0.8976E 00	0.9710E 00	0.8214E 00	0.7374E 00	0.4687E-00	0.9868E 00
0.3143	0.8314E 00	0.1189E 01	0.9067E 00	0.9753E 00	0.8303E 00	0.7529E 00	0.4939E-00	0.9868E 00
0.3429	0.8444E 00	0.1175E 01	0.9156E 00	0.9790E 00	0.8398E 00	0.7690E 00	0.5211E 00	0.9868E 00
0.3714	0.8565E 00	0.1162E 01	0.9234E 00	0.9817E 00	0.8495E 00	0.7844E 00	0.5476E 00	0.9868E 00
0.4000	0.8684E 00	0.1148E 01	0.9308E 00	0.9841E 00	0.8594E 00	0.8000E 00	0.5752E 00	0.9868E 00
0.4286	0.8787E 00	0.1136E 01	0.9370E 00	0.9858E 00	0.8684E 00	0.8137E 00	0.6003E 00	0.9868E 00
0.4571	0.8895E 00	0.1124E 01	0.9432E 00	0.9874E 00	0.8781E 00	0.8283E 00	0.6275E 00	0.9868E 00
0.4857	0.8984E 00	0.1113E 01	0.9482E 00	0.9885E 00	0.8863E 00	0.8405E 00	0.6510E 00	0.9868E 00
0.5143	0.9091E 00	0.1101E 01	0.9541E 00	0.9898E 00	0.8964E 00	0.8553E 00	0.6802E 00	0.9868E 00
0.5429	0.9183E 00	0.1090E 01	0.9591E 00	0.9908E 00	0.9052E 00	0.8683E 00	0.7066E 00	0.9868E 00
0.5714	0.9275E 00	0.1080E 01	0.9639E 00	0.9919E 00	0.9140E 00	0.8812E 00	0.7336E 00	0.9868E 00
0.6000	0.9365E 00	0.1069E 01	0.9687E 00	0.9929E 00	0.9229E 00	0.8941E 00	0.7614E 00	0.9868E 00
0.6286	0.9452E 00	0.1060E 01	0.9732E 00	0.9939E 00	0.9314E 00	0.9065E 00	0.7891E 00	0.9868E 00
0.6571	0.9536E 00	0.1050E 01	0.9775E 00	0.9948E 00	0.9397E 00	0.9187E 00	0.8167E 00	0.9868E 00
0.6857	0.9607E 00	0.1042E 01	0.9810E 00	0.9956E 00	0.9468E 00	0.9289E 00	0.8406E 00	0.9868E 00
0.7143	0.9682E 00	0.1034E 01	0.9848E 00	0.9964E 00	0.9543E 00	0.9399E 00	0.8668E 00	0.9868E 00
0.7429	0.9744E 00	0.1027E 01	0.9878E 00	0.9971E 00	0.9606E 00	0.9490E 00	0.8891E 00	0.9868E 00
0.7714	0.9805E 00	0.1021E 01	0.9908E 00	0.9977E 00	0.9669E 00	0.9581E 00	0.9117E 00	0.9868E 00
0.8000	0.9846E 00	0.1016E 01	0.9928E 00	0.9982E 00	0.9711E 00	0.9642E 00	0.9269E 00	0.9868E 00
0.8286	0.9885E 00	0.1012E 01	0.9947E 00	0.9986E 00	0.9762E 00	0.9711E 00	0.9430E 00	0.9879E 00
0.8571	0.9922E 00	0.1008E 01	0.9965E 00	0.9990E 00	0.9811E 00	0.9777E 00	0.9582E 00	0.9890E 00
0.8857	0.9944E 00	0.1006E 01	0.9975E 00	0.9992E 00	0.9855E 00	0.9832E 00	0.9691E 00	0.9912E 00
0.9143	0.9963E 00	0.1004E 01	0.9984E 00	0.9995E 00	0.9896E 00	0.9882E 00	0.9786E 00	0.9934E 00
0.9429	0.9977E 00	0.1002E 01	0.9991E 00	0.9996E 00	0.9933E 00	0.9926E 00	0.9867E 00	0.9956E 00
0.9714	0.9992E 00	0.1001E 01	0.9998E 00	0.9998E 00	0.9970E 00	0.9970E 00	0.9948E 00	0.9978E 00
1.0000	1.0000E 00	0.1000E 01	0.1000E 01	0.9999E 00	1.0000E 00	0.1000E 01	1.0000E 00	0.1000E 01

TABLE VII - CONTINUED.

(i) $M_\infty = 3.30$ STATION 10 $T_w/T_\delta = 1.824$

$\delta = 0.600$ IN $M_\delta = 3.219$ $T_\delta = 187.0$ °R $U_\delta = 2157$ FT/SEC $T_{T_\delta} = 574.5$ °R

$\rho_\delta = 0.5219 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.126$ SLUGS/FT²-SEC $P_\delta = 167.45$ PSF

Y/δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1824E 01	0.	0.5940E 00	0.4771E-00	0.	0.1714E-01	0.8707E 00
0.0083	0.4294E-00	0.1482E 01	[illegible]	0.6607E 00	0.5935E 00	0.3089E-00	0.5326E-01	0.8718E 00
0.0167	0.4954E-00	0.1434E 01	0.5981E 00	0.7151E 00	0.5996E 00	0.3585E-00	0.7253E-01	0.8728E 00
0.0250	0.5494E 00	0.1422E 01	0.6394E 00	0.7526E 00	0.6144E 00	0.4026E-00	0.9421E-01	0.8739E 00
0.0333	0.5993E 00	0.1375E 01	0.6971E 00	0.7759E 00	0.6383E 00	0.4448E-00	0.1183E-00	0.8750E 00
0.0417	0.6261E 00	0.1341E 01	0.7224E 00	0.7887E 00	0.6534E 00	0.4722E-00	0.1368E-00	0.8761E 00
0.0500	0.6425E 00	0.1324E 01	0.7499E 00	0.8001E 00	0.6624E 00	0.4899E-00	0.1504E-00	0.8772E 00
0.0583	0.6573E 00	0.1313E 01	0.7533E 00	0.8099E 00	0.6669E 00	0.5038E 00	0.1621E-00	0.8782E 00
0.0667	0.6695E 00	0.1304E 01	0.7668E 00	0.8169E 00	0.6742E 00	0.5155E 00	0.1726E-00	0.8793E 00
0.0750	0.6801E 00	0.1298E 01	0.7748E 00	0.8272E 00	0.6785E 00	0.5256E 00	0.1822E-00	0.8804E 00
0.0833	0.6895E 00	0.1292E 01	0.7839E 00	0.8350E 00	0.6821E 00	0.5346E 00	0.1913E-00	0.8815E 00
0.1250	0.7263E 00	0.1279E 01	0.8203E 00	0.8669E 00	0.6953E 00	0.5703E 00	0.2316E-00	0.8869E 00
0.1667	0.7552E 00	0.1264E 01	0.8498E 00	0.8990E 00	0.7048E 00	0.5988E 00	0.2694E-00	0.8922E 00
0.2083	0.7810E 00	0.1252E 01	0.8740E 00	0.9225E 00	0.7170E 00	0.6265E 00	0.3085E-00	0.8976E 00
0.2500	0.8012E 00	0.1235E 01	0.8926E 00	0.9392E 00	0.7313E 00	0.6526E 00	0.3467E-00	0.9030E 00
0.2917	0.8232E 00	0.1217E 01	0.9082E 00	0.9522E 00	0.7446E 00	0.6779E 00	0.3854E-00	0.9084E 00
0.3333	0.8436E 00	0.1196E 01	0.9228E 00	0.9636E 00	0.7636E 00	0.7047E 00	0.4288E-00	0.9138E 00
0.3750	0.8627E 00	0.1173E 01	0.9345E 00	0.9707E 00	0.7836E 00	0.7321E 00	0.4741E-00	0.9192E 00
0.4167	0.8815E 00	0.1151E 01	0.9466E 00	0.9782E 00	0.8029E 00	0.7594E 00	0.5229E 00	0.9246E 00
0.4583	0.8990E 00	0.1128E 01	0.9557E 00	0.9813E 00	0.8241E 00	0.7875E 00	0.5746E 00	0.9300E 00
0.5000	0.9176E 00	0.1105E 01	0.9646E 00	0.9871E 00	0.8446E 00	0.8165E 00	0.6309E 00	0.9353E 00
0.5417	0.9308E 00	0.1088E 01	0.9710E 00	0.9899E 00	0.8643E 00	0.8395E 00	0.6765E 00	0.9407E 00
0.5833	0.9437E 00	0.1072E 01	0.9767E 00	0.9918E 00	0.8834E 00	0.8628E 00	0.7240E 00	0.9461E 00
0.6250	0.9543E 00	0.1057E 01	0.9814E 00	0.9935E 00	0.9000E 00	0.8830E 00	0.7660E 00	0.9515E 00
0.6667	0.9666E 00	0.1041E 01	0.9866E 00	0.9944E 00	0.9187E 00	0.9062E 00	0.8172E 00	0.9569E 00
0.7083	0.9757E 00	0.1030E 01	0.9903E 00	0.9965E 00	0.9343E 00	0.9251E 00	0.8581E 00	0.9623E 00
0.7500	0.9827E 00	0.1021E 01	0.9931E 00	0.9974E 00	0.9477E 00	0.9409E 00	0.8919E 00	0.9677E 00
0.7917	0.9891E 00	0.1013E 01	0.9957E 00	0.9982E 00	0.9605E 00	0.9561E 00	0.9247E 00	0.9731E 00
0.8333	0.9924E 00	0.1009E 01	0.9970E 00	0.9987E 00	0.9697E 00	0.9665E 00	0.9445E 00	0.9784E 00
0.8750	0.9964E 00	0.1004E 01	0.9986E 00	0.9992E 00	0.9798E 00	0.9781E 00	0.9678E 00	0.9838E 00
0.9167	0.9984E 00	0.1001E 01	0.9995E 00	0.9994E 00	0.9878E 00	0.9871E 00	0.9835E 00	0.9892E 00
0.9583	0.9994E 00	0.1001E 01	0.9998E 00	0.9998E 00	0.9940E 00	0.9936E 00	0.9923E 00	0.9946E 00
1.0000	0.9999E 00	1.0000E 00	1.0000E 00	0.9999E 00	0.9999E 00	0.9998E 00	0.1000E 01	1.0000E 00

TABLE VII - CONTINUED.

(J) $M_\infty = 3.30$ STATION 12 $T_w/T_\delta = 1.884$

$\delta = 0.600$ IN $M_\delta = 3.402$ $T_\delta = 170.0$ °R $U_\delta = 2174$ FT/SEC $T_{T_\delta} = 563.4$ °R

$\rho_\delta = 0.4695 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 1.021$ SLUGS/FT²-SEC $P_\delta = 136.95$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1885E 01	0.	0.5687E 00	0.4984E-00	0.	0.1417E-01	0.9395E 00
0.0083	0.4223E-00	0.1636E 01	0.5401E 00	0.6973E 00	0.5746E 00	0.3102E-00	0.4750E-01	0.9399E 00
0.0167	0.5207E 00	0.1521E 01	0.6422E 00	0.7471E 00	0.6181E 00	0.3968E-00	0.7799E-01	0.9404E 00
0.0250	0.5765E 00	0.1478E 01	0.7007E 00	0.7888E 00	0.6367E 00	0.4461E-00	0.1045E-00	0.9409E 00
0.0333	0.5979E 00	0.1461E 01	0.7226E 00	0.8055E 00	0.6443E 00	0.4655E-00	0.1171E-00	0.9414E 00
0.0417	0.6134E 00	0.1448E 01	0.7382E 00	0.8177E 00	0.6502E 00	0.4799E-00	0.1272E-00	0.9418E 00
0.0500	0.6275E 00	0.1438E 01	0.7525E 00	0.8294E 00	0.6553E 00	0.4929E-00	0.1372E-00	0.9423E 00
0.0583	0.6392E 00	0.1428E 01	0.7639E 00	0.8385E 00	0.6601E 00	0.5041E 00	0.1461E-00	0.9428E 00
0.0667	0.6497E 00	0.1422E 01	0.7747E 00	0.8482E 00	0.6633E 00	0.5137E 00	0.1546E-00	0.9433E 00
0.0750	0.6593E 00	0.1414E 01	0.7849E 00	0.8558E 00	0.6675E 00	0.5231E 00	0.1627E-00	0.9437E 00
0.0833	0.6694E 00	0.1405E 01	0.7943E 00	0.8635E 00	0.6722E 00	0.5331E 00	0.1718E-00	0.9442E 00
0.1250	0.7091E 00	0.1367E 01	0.8289E 00	0.8923E 00	0.6926E 00	0.5739E 00	0.2127E-00	0.9466E 00
0.1667	0.7420E 00	0.1332E 01	0.8565E 00	0.9144E 00	0.7121E 00	0.6097E 00	0.2539E-00	0.9490E 00
0.2083	0.7705E 00	0.1298E 01	0.8779E 00	0.9300E 00	0.7328E 00	0.6431E 00	0.2958E-00	0.9514E 00
0.2500	0.7940E 00	0.1270E 01	0.8949E 00	0.9426E 00	0.7508E 00	0.6717E 00	0.3355E-00	0.9537E 00
0.2917	0.8154E 00	0.1243E 01	0.9090E 00	0.9520E 00	0.7694E 00	0.6991E 00	0.3761E-00	0.9561E 00
0.3333	0.8328E 00	0.1222E 01	0.9206E 00	0.9607E 00	0.7843E 00	0.7218E 00	0.4126E-00	0.9585E 00
0.3750	0.8510E 00	0.1202E 01	0.9328E 00	0.9703E 00	0.7997E 00	0.7457E 00	0.4544E-00	0.9609E 00
0.4167	0.8672E 00	0.1182E 01	0.9429E 00	0.9777E 00	0.8148E 00	0.7680E 00	0.4952E-00	0.9632E 00
0.4583	0.8860E 00	0.1156E 01	0.9526E 00	0.9828E 00	0.8352E 00	0.7954E 00	0.5464E 00	0.9656E 00
0.5000	0.9041E 00	0.1131E 01	0.9614E 00	0.9968E 00	0.8560E 00	0.8226E 00	0.6004E 00	0.9680E 00
0.5417	0.9182E 00	0.1111E 01	0.9678E 00	0.9894E 00	0.8734E 00	0.8450E 00	0.6464E 00	0.9704E 00
0.5833	0.9297E 00	0.1095E 01	0.9729E 00	0.9917E 00	0.8882E 00	0.8639E 00	0.6868E 00	0.9728E 00
0.6250	0.9422E 00	0.1077E 01	0.9780E 00	0.9932E 00	0.9050E 00	0.8848E 00	0.7329E 00	0.9751E 00
0.6667	0.9534E 00	0.1062E 01	0.9824E 00	0.9945E 00	0.9206E 00	0.9041E 00	0.7768E 00	0.9775E 00
0.7083	0.9655E 00	0.1045E 01	0.9870E 00	0.9959E 00	0.9374E 00	0.9250E 00	0.8267E 00	0.9799E 00
0.7500	0.9741E 00	0.1034E 01	0.9903E 00	0.9969E 00	0.9502E 00	0.9407E 00	0.8648E 00	0.9823E 00
0.7917	0.9820E 00	0.1023E 01	0.9933E 00	0.9978E 00	0.9634E 00	0.9566E 00	0.9024E 00	0.9857E 00
0.8333	0.9833E 00	0.1015E 01	0.9956E 00	0.9986E 00	0.9735E 00	0.9689E 00	0.9328E 00	0.9881E 00
0.8750	0.9934E 00	0.1008E 01	0.9974E 00	0.9992E 00	0.9823E 00	0.9795E 00	0.9589E 00	0.9905E 00
0.9167	0.9964E 00	0.1004E 01	0.9985E 00	0.9995E 00	0.9884E 00	0.9867E 00	0.9753E 00	0.9929E 00
0.9583	0.9931E 00	0.1001E 01	0.9995E 00	0.9999E 00	0.9947E 00	0.9939E 00	0.9912E 00	0.9957E 00
1.0000	1.0000E 00	0.9999E 00	0.9999E 00	0.1000E 01	0.1000E 01	0.9996E 00	0.9999E 00	0.1000E 01

TABLE VII - CONTINUED.

(k) $M_\infty = 3.30$ STATION 14 $T_w/T_\delta = 1.903$

$\delta = 0.625$ IN $M_\delta = 3.456$ $T_\delta = 168.1$ °R $U_\delta = 2196$ FT/SEC $T_{T_\delta} = 569.7$ °R

$\rho_\delta = 0.3973 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.8726$ SLUGS/FT²-SEC $P_\delta = 114.61$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.1903E 01	0.	0.5616E 00	0.5219E 00	0.	0.1387E-01	0.9932E 00
0.0080	0.4065E-00	0.1547E 01	0.5056E 00	0.6365E 00	0.6422E 00	0.3246E-00	0.4443E-01	0.9932E 00
0.0160	0.4824E-00	0.1424E 01	0.5757E 00	0.6538E 00	0.6975E 00	0.4015E-00	0.6515E-01	0.9932E 00
0.0240	0.5214E 00	0.1408E 01	0.6187E 00	0.6852E 00	0.7055E 00	0.4364E-00	0.7991E-01	0.9932E 00
0.0320	0.5469E 00	0.1417E 01	0.6510E 00	0.7167E 00	0.7012E 00	0.4564E-00	0.9151E-01	0.9932E 00
0.0400	0.5684E 00	0.1414E 01	0.6760E 00	0.7394E 00	0.7024E 00	0.4747E-00	0.1027E-00	0.9932E 00
0.0480	0.5857E 00	0.1411E 01	0.6958E 00	0.7576E 00	0.7039E 00	0.4897E-00	0.1127E-00	0.9932E 00
0.0560	0.6006E 00	0.1405E 01	0.7120E 00	0.7720E 00	0.7068E 00	0.5031E 00	0.1221E-00	0.9932E 00
0.0640	0.6143E 00	0.1397E 01	0.7262E 00	0.7840E 00	0.7109E 00	0.5162E 00	0.1315E-00	0.9932E 00
0.0720	0.6264E 00	0.1392E 01	0.7389E 00	0.7954E 00	0.7138E 00	0.5273E 00	0.1403E-00	0.9932E 00
0.0800	0.6371E 00	0.1384E 01	0.7496E 00	0.8046E 00	0.7175E 00	0.5378E 00	0.1487E-00	0.9932E 00
0.1200	0.6793E 00	0.1357E 01	0.7914E 00	0.8419E 00	0.7318E 00	0.5791E 00	0.1868E-00	0.9932E 00
0.1600	0.7124E 00	0.1334E 01	0.8227E 00	0.8707E 00	0.7447E 00	0.6126E 00	0.2233E-00	0.9932E 00
0.2000	0.7409E 00	0.1311E 01	0.8484E 00	0.8942E 00	0.7576E 00	0.6426E 00	0.2604E-00	0.9932E 00
0.2400	0.7658E 00	0.1289E 01	0.8694E 00	0.9130E 00	0.7707E 00	0.6699E 00	0.2973E-00	0.9932E 00
0.2800	0.7904E 00	0.1260E 01	0.8874E 00	0.9269E 00	0.7880E 00	0.6992E 00	0.3389E-00	0.9932E 00
0.3200	0.8145E 00	0.1232E 01	0.9041E 00	0.9396E 00	0.8063E 00	0.7288E 00	0.3851E-00	0.9932E 00
0.3600	0.8350E 00	0.1211E 01	0.9189E 00	0.9524E 00	0.8203E 00	0.7536E 00	0.4288E-00	0.9932E 00
0.4000	0.8519E 00	0.1194E 01	0.9307E 00	0.9627E 00	0.8322E 00	0.7744E 00	0.4683E-00	0.9932E 00
0.4400	0.8668E 00	0.1177E 01	0.9405E 00	0.9709E 00	0.8436E 00	0.7934E 00	0.5061E 00	0.9932E 00
0.4800	0.8789E 00	0.1165E 01	0.9485E 00	0.9778E 00	0.8529E 00	0.8089E 00	0.5389E 00	0.9932E 00
0.5200	0.8926E 00	0.1146E 01	0.9558E 00	0.9821E 00	0.8664E 00	0.8280E 00	0.5784E 00	0.9932E 00
0.5600	0.9075E 00	0.1126E 01	0.9635E 00	0.9867E 00	0.8819E 00	0.8496E 00	0.6254E 00	0.9932E 00
0.6000	0.9214E 00	0.1108E 01	0.9700E 00	0.9900E 00	0.8964E 00	0.8694E 00	0.6702E 00	0.9932E 00
0.6400	0.9348E 00	0.1089E 01	0.9757E 00	0.9925E 00	0.9117E 00	0.8895E 00	0.7172E 00	0.9932E 00
0.6800	0.9468E 00	0.1072E 01	0.9804E 00	0.9939E 00	0.9263E 00	0.9080E 00	0.7619E 00	0.9932E 00
0.7200	0.9586E 00	0.1056E 01	0.9849E 00	0.9952E 00	0.9409E 00	0.9266E 00	0.8085E 00	0.9932E 00
0.7600	0.9679E 00	0.1043E 01	0.9884E 00	0.9963E 00	0.9526E 00	0.9414E 00	0.8472E 00	0.9932E 00
0.8000	0.9760E 00	0.1032E 01	0.9914E 00	0.9972E 00	0.9628E 00	0.9543E 00	0.8822E 00	0.9942E 00
0.8400	0.9833E 00	0.1022E 01	0.9941E 00	0.9980E 00	0.9734E 00	0.9675E 00	0.9162E 00	0.9946E 00
0.8800	0.9902E 00	0.1013E 01	0.9966E 00	0.9988E 00	0.9834E 00	0.9799E 00	0.9492E 00	0.9958E 00
0.9200	0.9957E 00	0.1006E 01	0.9985E 00	0.9994E 00	0.9916E 00	0.9900E 00	0.9765E 00	0.9970E 00
0.9600	0.9996E 00	0.1001E 01	0.9999E 00	0.9999E 00	0.9978E 00	0.9975E 00	0.9966E 00	0.9982E 00
1.0000	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.1000E 01

TABLE VII - CONTINUED.

(1) $M_\infty = 4.50$ STATION 10 $T_w/T_\delta = 2.882$

$\delta = 0.600$ IN $M_\delta = 4.084$ $T_\delta = 130.7$ °R $U_\delta = 2289$ FT/SEC $T_{T_\delta} = 566.9$ °R

$\rho_\delta = 0.2039 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.4666$ SLUGS/FT² - SEC P_δ 45.74 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.2883E 01	0.	0.6646E 00	0.3268E-00	0.	0.5547E-02	0.9417E 00
0.0083	0.3303E-00	0.2157E 01	0.4850E-00	0.6783E 00	0.4367E-00	0.2119E-00	0.1643E-01	0.9417E 00
0.0167	0.4579E-00	0.1766E 01	0.6084E 00	0.6920E 00	0.5333E 00	0.3246E-00	0.3549E-01	0.9417E 00
0.0250	0.4899E-00	0.1700E 01	0.6385E 00	0.7056E 00	0.5542E 00	0.3539E-00	0.4344E-01	0.9417E 00
0.0333	0.5104E 00	0.1669E 01	0.6592E 00	0.7194E 00	0.5642E 00	0.3720E-00	0.4949E-01	0.9417E 00
0.0417	0.5263E 00	0.1651E 01	0.6762E 00	0.7326E 00	0.5704E 00	0.3858E-00	0.5480E-01	0.9417E 00
0.0500	0.5400E 00	0.1641E 01	0.6915E 00	0.7463E 00	0.5741E 00	0.3971E-00	0.5982E-01	0.9417E 00
0.0583	0.5525E 00	0.1628E 01	0.7048E 00	0.7577E 00	0.5785E 00	0.4078E-00	0.6478E-01	0.9417E 00
0.0667	0.5630E 00	0.1619E 01	0.7160E 00	0.7677E 00	0.5820E 00	0.4168E-00	0.6926E-01	0.9417E 00
0.0750	0.5741E 00	0.1606E 01	0.7273E 00	0.7772E 00	0.5866E 00	0.4267E-00	0.7437E-01	0.9417E 00
0.0833	0.5842E 00	0.1593E 01	0.7370E 00	0.7852E 00	0.5915E 00	0.4360E-00	0.7931E-01	0.9417E 00
0.1250	0.6266E 00	0.1541E 01	0.7776E 00	0.8206E 00	0.6115E 00	0.4756E-00	0.1039E-00	0.9421E 00
0.1667	0.6627E 00	0.1495E 01	0.8101E 00	0.8498E 00	0.6303E 00	0.5108E 00	0.1305E-00	0.9424E 00
0.2083	0.6932E 00	0.1456E 01	0.8361E 00	0.8736E 00	0.6480E 00	0.5419E 00	0.1580E-00	0.9431E 00
0.2500	0.7210E 00	0.1418E 01	0.8583E 00	0.8940E 00	0.6656E 00	0.5715E 00	0.1878E-00	0.9438E 00
0.2917	0.7457E 00	0.1383E 01	0.8765E 00	0.9100E 00	0.6835E 00	0.5992E 00	0.2187E-00	0.9448E 00
0.3333	0.7712E 00	0.1342E 01	0.8933E 00	0.9236E 00	0.7050E 00	0.6299E 00	0.2558E-00	0.9461E 00
0.3750	0.7953E 00	0.1303E 01	0.9076E 00	0.9344E 00	0.7272E 00	0.6602E 00	0.2960E-00	0.9475E 00
0.4167	0.8194E 00	0.1264E 01	0.9208E 00	0.9439E 00	0.7506E 00	0.6914E 00	0.3418E-00	0.9485E 00
0.4583	0.8431E 00	0.1225E 01	0.9328E 00	0.9520E 00	0.7750E 00	0.7231E 00	0.3932E-00	0.9492E 00
0.5000	0.8663E 00	0.1187E 01	0.9443E 00	0.9600E 00	0.8007E 00	0.7564E 00	0.4522E-00	0.9505E 00
0.5417	0.8902E 00	0.1151E 01	0.9547E 00	0.9667E 00	0.8285E 00	0.7912E 00	0.5184E 00	0.9533E 00
0.5833	0.9107E 00	0.1120E 01	0.9636E 00	0.9729E 00	0.8534E 00	0.8226E 00	0.5839E 00	0.9560E 00
0.6250	0.9311E 00	0.1091E 01	0.9722E 00	0.9790E 00	0.8789E 00	0.8547E 00	0.6567E 00	0.9587E 00
0.6667	0.9486E 00	0.1067E 01	0.9797E 00	0.9846E 00	0.9017E 00	0.8836E 00	0.7265E 00	0.9621E 00
0.7083	0.9652E 00	0.1044E 01	0.9861E 00	0.9890E 00	0.9247E 00	0.9121E 00	0.7989E 00	0.9654E 00
0.7500	0.9781E 00	0.1027E 01	0.9907E 00	0.9920E 00	0.9439E 00	0.9354E 00	0.8600E 00	0.9688E 00
0.7917	0.9871E 00	0.1015E 01	0.9941E 00	0.9945E 00	0.9591E 00	0.9537E 00	0.9071E 00	0.9732E 00
0.8333	0.9935E 00	0.1007E 01	0.9966E 00	0.9965E 00	0.9711E 00	0.9681E 00	0.9436E 00	0.9776E 00
0.8750	0.9976E 00	0.1002E 01	0.9983E 00	0.9981E 00	0.9805E 00	0.9791E 00	0.9694E 00	0.9824E 00
0.9167	0.9994E 00	0.1000E 01	0.9993E 00	0.9991E 00	0.9876E 00	0.9872E 00	0.9844E 00	0.9878E 00
0.9583	0.1000E 01	0.9994E 00	0.9997E 00	0.9996E 00	0.9940E 00	0.9940E 00	0.9946E 00	0.9932E 00
1.0000	0.1000E 01	0.1000E 01	0.9999E 00	1.0000E 00	1.0000E 00	0.1000E 01	1.0000E 00	0.1000E 01

TABLE VII - CONTINUED.

(m) $M_\infty = 4.50$ STATION 12 $T_w/T_\delta = 3.034$

$\delta = 0.850$ IN $M_\delta = 4.411$ $T_\delta = 115.5$ °R $U_\delta = 2323$ FT/SEC $T_{T_\delta} = 565.0$ °R

$\rho_\delta = 0.1830 \times 10^{-3}$ SLUGS/FT³ $\rho_\delta U_\delta = 0.4252$ SLUGS/FT²-SEC $P_\delta = 36.27$ PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3034E 01	0.	0.6203E 00	0.2933E-00	0.	0.3442E-02	0.8898E 00
0.0059	0.3072E-00	0.2389E 01	0.4750E-00	0.6679E 00	0.3725E-00	0.1769E-00	0.1028E-01	0.8898E 00
0.0118	0.4130E-00	0.2065E 01	0.5935E 00	0.7023E 00	0.4310E-00	0.2558E-00	0.2044E-01	0.8898E 00
0.0176	0.4527E-00	0.1931E 01	0.6291E 00	0.7095E 00	0.4610E-00	0.2900E-00	0.2680E-01	0.8898E 00
0.0235	0.4742E-00	0.1890E 01	0.6520E 00	0.7244E 00	0.4709E-00	0.3070E-00	0.3106E-01	0.8898E 00
0.0294	0.4914E-00	0.1879E 01	0.6737E 00	0.7450E 00	0.4737E-00	0.3190E-00	0.3497E-01	0.8898E 00
0.0353	0.5058E 00	0.1866E 01	0.6909E 00	0.7610E 00	0.4771E-00	0.32[illegible]E-00	0.3863E-01	0.8898E 00
0.0412	0.5187E 00	0.1853E 01	0.7061E 00	0.7753E 00	0.4804E-00	0.3392E-00	0.4223E-01	0.8898E 00
0.0471	0.5303E 00	0.1838E 01	0.7190E 00	0.7867E 00	0.4843E-00	0.3481E-00	0.4575E-01	0.8898E 00
0.0529	0.5406E 00	0.1823E 01	0.7301E 00	0.7966E 00	0.4881E-00	0.3563E-00	0.4912E-01	0.8898E 00
0.0588	0.5497E 00	0.1809E 01	0.7394E 00	0.8045E 00	0.4921E-00	0.3638E-00	0.5230E-01	0.8898E 00
0.0882	0.5922E 00	0.1731E 01	0.7794E 00	0.8370E 00	0.5140E 00	0.4005E-00	0.6998E-01	0.8898E 00
0.1176	0.6275E 00	0.1662E 01	0.8090E 00	0.8602E 00	0.5356E 00	0.4332E-00	0.8890E-01	0.8898E 00
0.1471	0.6566E 00	0.1606E 01	0.8323E 00	0.8793E 00	0.5541E 00	0.4611E-00	0.1081E-00	0.8898E 00
0.1765	0.6878E 00	0.1545E 01	0.8550E 00	0.8971E 00	0.5761E 00	0.4925E-00	0.1330E-00	0.8898E 00
0.2059	0.7114E 00	0.1503E 01	0.8722E 00	0.9121E 00	0.5923E 00	0.5165E 00	0.1553E-00	0.8898E 00
0.2353	0.7350E 00	0.1459E 01	0.8879E 00	0.9252E 00	0.6101E 00	0.5416E 00	0.1810E-00	0.8898E 00
0.2647	0.7570E 00	0.1420E 01	0.9020E 00	0.9373E 00	0.6273E 00	0.5657E 00	0.2085E-00	0.8903E 00
0.2941	0.7774E 00	0.1383E 01	0.9145E 00	0.9479E 00	0.6442E 00	0.5890E 00	0.2376E-00	0.8911E 00
0.3235	0.7964E 00	0.1352E 01	0.9260E 00	0.9581E 00	0.6604E 00	0.6114E 00	0.2680E-00	0.8924E 00
0.3529	0.8162E 00	0.1318E 01	0.9372E 00	0.9679E 00	0.6792E 00	0.6364E 00	0.3042E-00	0.8949E 00
0.3824	0.8358E 00	0.1283E 01	0.9469E 00	0.9754E 00	0.7002E 00	0.6629E 00	0.3444E-00	0.8983E 00
0.4118	0.8565E 00	0.1244E 01	0.9555E 00	0.9805E 00	0.7241E 00	0.6917E 00	0.3917E-00	0.9008E 00
0.4412	0.8761E 00	0.1208E 01	0.9629E 00	0.9843E 00	0.7489E 00	0.7209E 00	0.4425E-00	0.9042E 00
0.4706	0.8951E 00	0.1173E 01	0.9696E 00	0.9875E 00	0.7739E 00	0.7503E 00	0.4975E-00	0.9076E 00
0.5000	0.9132E 00	0.1140E 01	0.9753E 00	0.9895E 00	0.7999E 00	0.7800E 00	0.5560E 00	0.9119E 00
0.5294	0.9301E 00	0.1111E 01	0.9803E 00	0.9913E 00	0.8242E 00	0.8079E 00	0.6157E 00	0.9153E 00
0.5588	0.9431E 00	0.1088E 01	0.9841E 00	0.9927E 00	0.8441E 00	0.8306E 00	0.6665E 00	0.9186E 00
0.5882	0.9544E 00	0.1070E 01	0.9873E 00	0.9940E 00	0.8628E 00	0.8516E 00	0.7141E 00	0.9229E 00
0.6176	0.9627E 00	0.1056E 01	0.9897E 00	0.9949E 00	0.8786E 00	0.8693E 00	0.7531E 00	0.9280E 00
0.6471	0.9704E 00	0.1044E 01	0.9918E 00	0.9957E 00	0.8937E 00	0.8861E 00	0.7909E 00	0.9331E 00
0.6765	0.9768E 00	0.1034E 01	0.9936E 00	0.9965E 00	0.9073E 00	0.9012E 00	0.8247E 00	0.9381E 00
0.7059	0.9816E 00	0.1027E 01	0.9949E 00	0.9970E 00	0.9187E 00	0.9138E 00	0.8517E 00	0.9432E 00
0.7353	0.9848E 00	0.1022E 01	0.9957E 00	0.9975E 00	0.9288E 00	0.9246E 00	0.8725E 00	0.9492E 00
0.7647	0.9889E 00	0.1016E 01	0.9969E 00	0.9980E 00	0.9403E 00	0.9372E 00	0.8987E 00	0.9551E 00
0.7941	0.9924E 00	0.1011E 01	0.9978E 00	0.9984E 00	0.9503E 00	0.9480E 00	0.9214E 00	0.9602E 00
0.8235	0.9939E 00	0.1009E 01	0.9983E 00	0.9987E 00	0.9581E 00	0.9563E 00	0.9348E 00	0.9661E 00
0.8529	0.9959E 00	0.1006E 01	0.9989E 00	0.9990E 00	0.9668E 00	0.9655E 00	0.9510E 00	0.9720E 00
0.8824	0.9978E 00	0.1003E 01	0.9994E 00	0.9993E 00	0.9745E 00	0.9737E 00	0.9661E 00	0.9771E 00
0.9118	0.9987E 00	0.1002E 01	0.9997E 00	0.9995E 00	0.9816E 00	0.9811E 00	0.9770E 00	0.9831E 00
0.9412	0.9991E 00	0.1001E 01	0.9999E 00	0.9997E 00	0.9880E 00	0.9877E 00	0.9852E 00	0.9890E 00
0.9706	1.0000E 00	0.1000E 01	0.1000E 01	0.9999E 00	0.9943E 00	0.9942E 00	0.9950E 00	0.9941E 00
1.0000	0.9999E 00	0.1000E 01	0.1000E 01	0.1000E 01	0.9999E 00	0.9999E 00	0.1000E 01	0.1000E 01

TABLE VII - CONCLUDED.

(n) M_∞ = 4.50 STATION 14 T_w/T_δ = 3.356

δ = 0.025 IN M_δ = 4.327 T_δ = 120.4 °R U_δ = 2327 FT/SEC T_{T_δ} = 571.3 °R

ρ_δ = 0.1572 $\times 10^{-3}$ SLUGS/FT^3 $\rho_\delta U_\delta$ = 0.3657 SLUGS/FT^2-SEC P_δ = 32.46 PSF

y/y_δ	M/M_δ	T/T_δ	U/U_δ	T_T/T_{T_δ}	ρ/ρ_δ	$\rho U/\rho_\delta U_\delta$	P_T/P_{T_δ}	P/P_δ
0.	0.	0.3358E 01	0.	0.7078E 00	0.2920E-00	0.	0.4215E-02	0.9811E 00
0.0061	0.2527E-00	0.2551E 01	0.4036E-00	0.6662E 00	0.3844E-00	0.1552E-00	0.8924E-02	0.9811E 00
0.0121	0.3766E-00	0.2107E 01	0.5466E 00	0.6798E 00	0.4655E-00	0.2545E-00	0.1871E-01	0.9811E 00
0.0182	0.4328E-00	0.1895E 01	0.5958E 00	0.6795E 00	0.5175E 00	0.3084E-00	0.2708E-01	0.9811E 00
0.0242	0.4602E-00	0.1814E 01	0.6197E 00	0.6854E 00	0.5407E 00	0.3352E-00	0.3252E-01	0.9811E 00
0.0303	0.4799E-00	0.1791E 01	0.6422E 00	0.7030E 00	0.5476E 00	0.3518E-00	0.3716E-01	0.9811E 00
0.0364	0.4930E-00	0.1782E 01	0.6582E 00	0.7175E 00	0.5503E 00	0.3623E-00	0.4061E-01	0.9811E 00
0.0424	0.5035E 00	0.1774E 01	0.6706E 00	0.7288E 00	0.5529E 00	0.3709E-00	0.4359E-01	0.9811E 00
0.0485	0.5138E 00	0.1766E 01	0.6827E 00	0.7399E 00	0.5555E 00	0.3793E-00	0.4673E-01	0.9811E 00
0.0545	0.5227E 00	0.1759E 01	0.6932E 00	0.7500E 00	0.5576E 00	0.3867E-00	0.4964E-01	0.9811E 00
0.0606	0.5315E 00	0.1751E 01	0.7033E 00	0.7594E 00	0.5601E 00	0.3940E-00	0.5269E-01	0.9811E 00
0.0909	0.5734E 00	0.1708E 01	0.7493E 00	0.8031E 00	0.5743E 00	0.4305E-00	0.6994E-01	0.9811E 00
0.1212	0.6096E 00	0.1664E 01	0.7863E 00	0.8385E 00	0.5896E 00	0.4637E-00	0.8917E-01	0.9811E 00
0.1515	0.6402E 00	0.1621E 01	0.8151E 00	0.8660E 00	0.6049E 00	0.4932E-00	0.1093E-00	0.9811E 00
0.1818	0.6667E 00	0.1578E 01	0.8374E 00	0.8859E 00	0.6216E 00	0.5207E 00	0.1301E-00	0.9811E 00
0.2121	0.6922E 00	0.1534E 01	0.8572E 00	0.9032E 00	0.6395E 00	0.5483E 00	0.1537E-00	0.9811E 00
0.2424	0.7152E 00	0.1496E 01	0.8747E 00	0.9191E 00	0.6556E 00	0.5737E 00	0.1783E-00	0.9811E 00
0.2727	0.7367E 00	0.1455E 01	0.8885E 00	0.9296E 00	0.6743E 00	0.5992E 00	0.2046E-00	0.9811E 00
0.3030	0.7576E 00	0.1414E 01	0.9010E 00	0.9387E 00	0.6934E 00	0.6249E 00	0.2336E-00	0.9811E 00
0.3333	0.7757E 00	0.1381E 01	0.9115E 00	0.9468E 00	0.7102E 00	0.6475E 00	0.2617E-00	0.9811E 00
0.3636	0.7941E 00	0.1347E 01	0.9216E 00	0.9542E 00	0.7281E 00	0.6712E 00	0.2934E-00	0.9811E 00
0.3939	0.8121E 00	0.1314E 01	0.9310E 00	0.9610E 00	0.7462E 00	0.6949E 00	0.3278E-00	0.9811E 00
0.4242	0.8290E 00	0.1284E 01	0.9394E 00	0.9671E 00	0.7637E 00	0.7176E 00	0.3635E-00	0.9811E 00
0.4545	0.8462E 00	0.1253E 01	0.9472E 00	0.9721E 00	0.7827E 00	0.7416E 00	0.4034E-00	0.9811E 00
0.4848	0.8617E 00	0.1226E 01	0.9542E 00	0.9769E 00	0.8000E 00	0.7635E 00	0.4429E-00	0.9811E 00
0.5152	0.8790E 00	0.1196E 01	0.9612E 00	0.9813E 00	0.8201E 00	0.7885E 00	0.4908E-00	0.9811E 00
0.5455	0.8940E 00	0.1171E 01	0.9674E 00	0.9853E 00	0.8376E 00	0.8105E 00	0.5361E 00	0.9811E 00
0.5758	0.9093E 00	0.1145E 01	0.9730E 00	0.9884E 00	0.8566E 00	0.8337E 00	0.5864E 00	0.9811E 00
0.6061	0.9238E 00	0.1121E 01	0.9779E 00	0.9909E 00	0.8753E 00	0.8562E 00	0.6378E 00	0.9811E 00
0.6364	0.9369E 00	0.1099E 01	0.9821E 00	0.9929E 00	0.8924E 00	0.8767E 00	0.6874E 00	0.9811E 00
0.6667	0.9491E 00	0.1079E 01	0.9859E 00	0.9946E 00	0.9088E 00	0.8963E 00	0.7372E 00	0.9811E 00
0.6970	0.9588E 00	0.1064E 01	0.9888E 00	0.9958E 00	0.9222E 00	0.9121E 00	0.7787E 00	0.9812E 00
0.7273	0.9676E 00	0.1049E 01	0.9912E 00	0.9966E 00	0.9349E 00	0.9269E 00	0.8190E 00	0.9814E 00
0.7576	0.9758E 00	0.1037E 01	0.9935E 00	0.9974E 00	0.9468E 00	0.9409E 00	0.8577E 00	0.9817E 00
0.7879	0.9815E 00	0.1028E 01	0.9950E 00	0.9979E 00	0.9553E 00	0.9508E 00	0.8859E 00	0.9821E 00
0.8182	0.9868E 00	0.1020E 01	0.9964E 00	0.9984E 00	0.9640E 00	0.9608E 00	0.9134E 00	0.9832E 00
0.8485	0.9900E 00	0.1015E 01	0.9973E 00	0.9987E 00	0.9703E 00	0.9679E 00	0.9314E 00	0.9849E 00
0.8788	0.9926E 00	0.1011E 01	0.9980E 00	0.9990E 00	0.9768E 00	0.9751E 00	0.9477E 00	0.9877E 00
0.9091	0.9946E 00	0.1008E 01	0.9985E 00	0.9993E 00	0.9825E 00	0.9813E 00	0.9611E 00	0.9906E 00
0.9394	0.9975E 00	0.1004E 01	0.9993E 00	0.9996E 00	0.9899E 00	0.9895E 00	0.9799E 00	0.9939E 00
0.9697	0.9993E 00	0.1001E 01	0.9998E 00	0.9998E 00	0.9957E 00	0.9958E 00	0.9926E 00	0.9972E 00
1.0000	0.1000E 01	0.9999E 00	0.1000E 01	1.0000E 00	0.9997E 00	0.1000E 01	1.0000E 00	0.1000E 01

TABLE VIII

ADDITIONAL DATA FOR PROFILES FROM REFERENCES 3 AND 44

SOURCE	STATION	M_δ	δ(in.)	δ^*(in.)	θ(in.)	R_δ/in.	$U_\delta(\frac{ft}{sec})$	T_δ(°R)	T_w(°R)	P_δ(PSF)
Reference 3	150 mm	2.57	0.188	0.115	0.0108	1.95×10^5	1965	243.5	525.0	96.9
	348 mm	2.57	0.276	0.199	0.0187	1.95×10^5	1965	243.5	525.0	97.4
Reference 44	37.5 in.	3.04	0.850	0.119	0.0183	1.24×10^5	2124	203.1	534.1	400.0
	91.5 in.	2.98	1.225	0.281	0.0515	1.31×10^5	2104	207.9	534.8	446.0
	37.5 in.	4.86	0.575	0.192	0.0200	1.15×10^5	2574	116.7	528.9	97.6
	91.5 in.	4.86	1.100	0.384	0.0308	1.53×10^5	2624	121.6	543.0	100.0

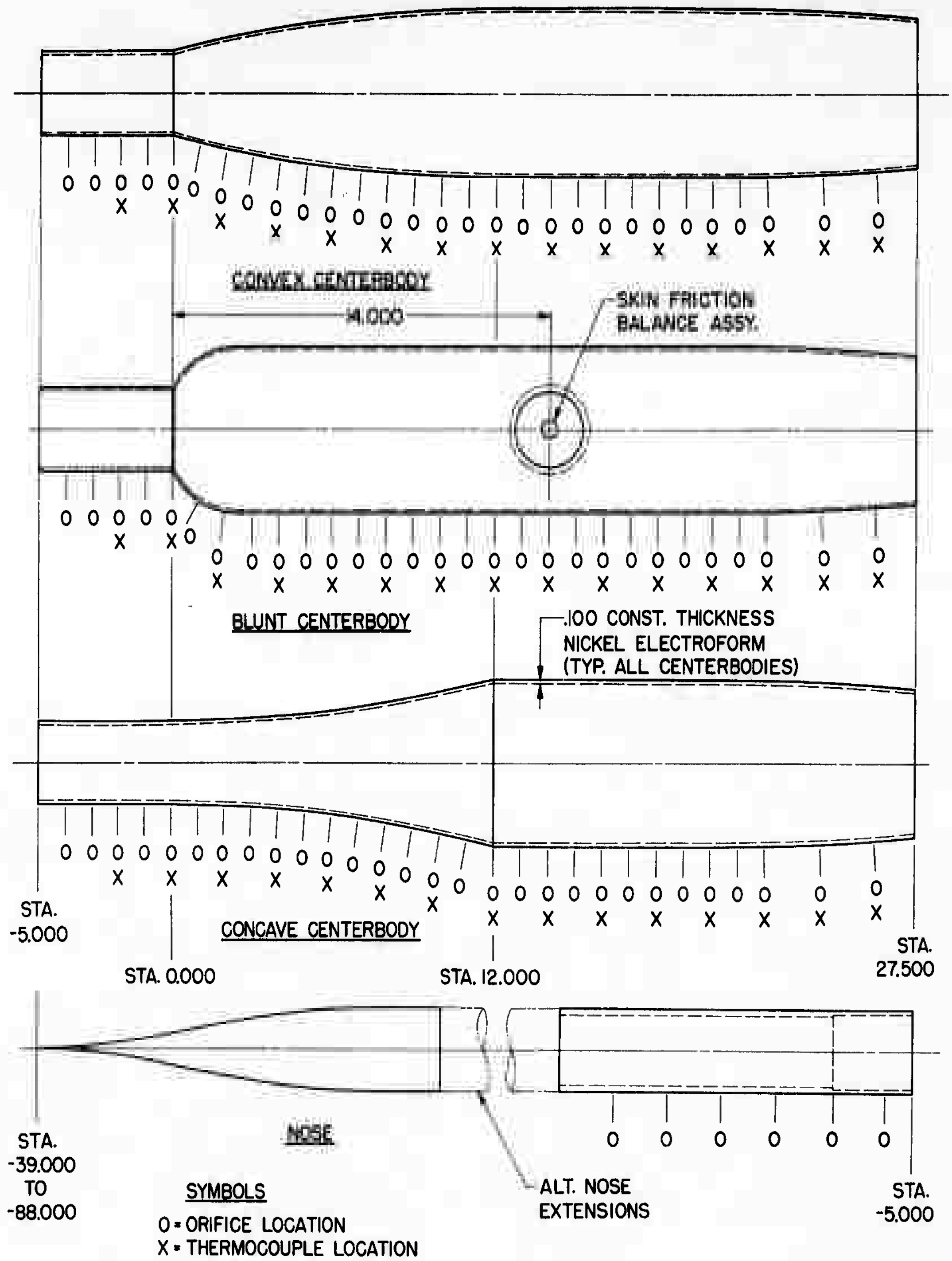


Figure 1. - Three centerbodies and nose piece.

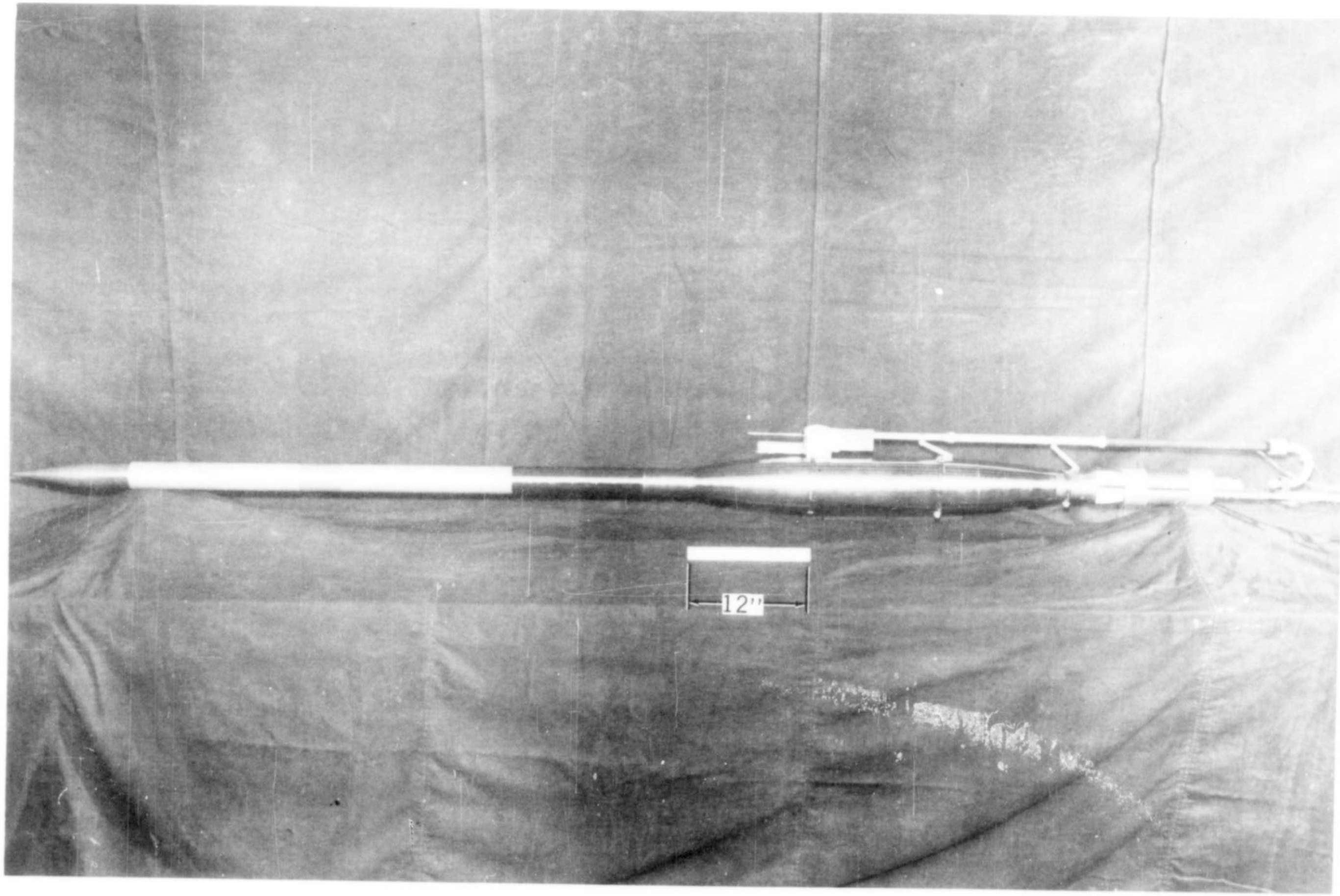


Figure 2.- A complete model showing nose, convex center section and aft section with the traversing rake mounted at station 6.

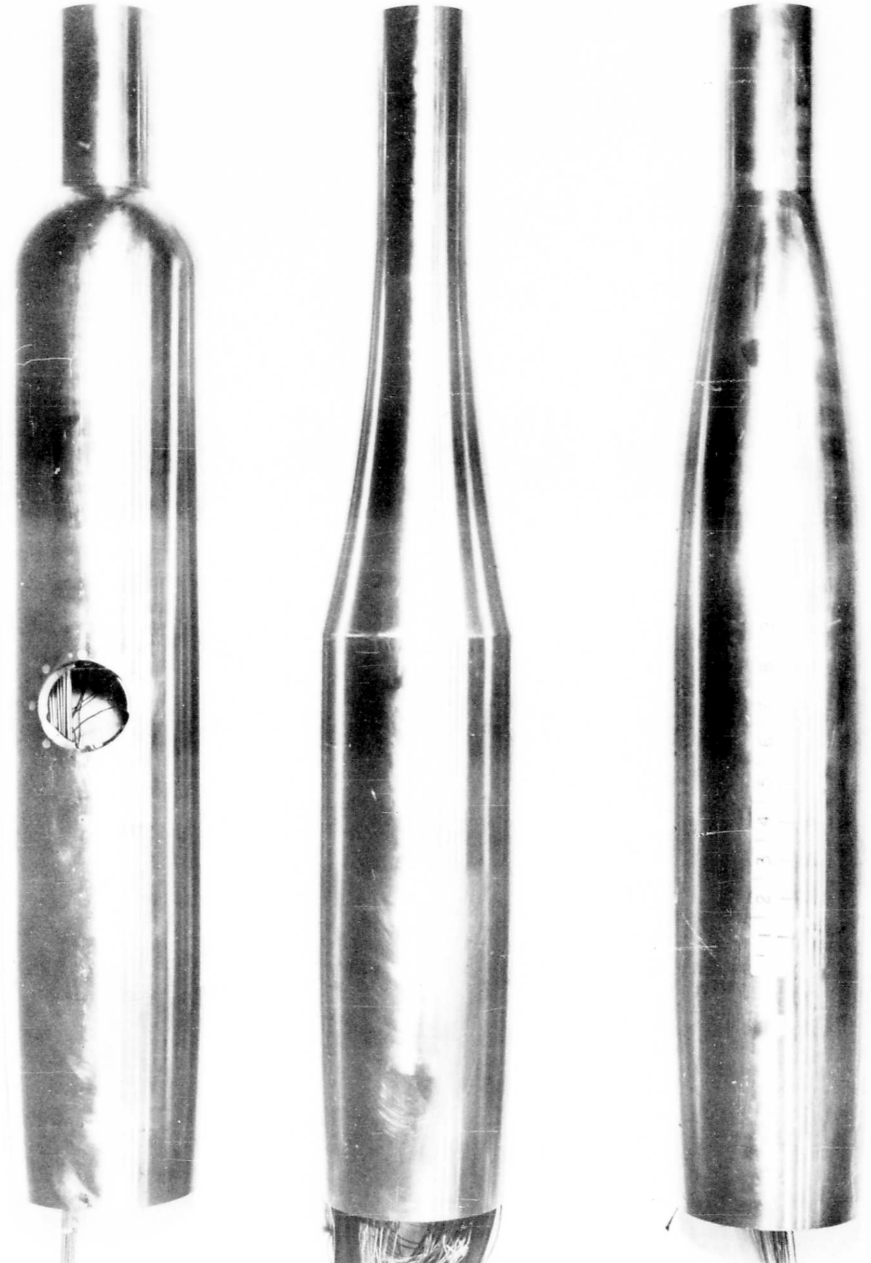


Figure 3. - Three centerbodies.

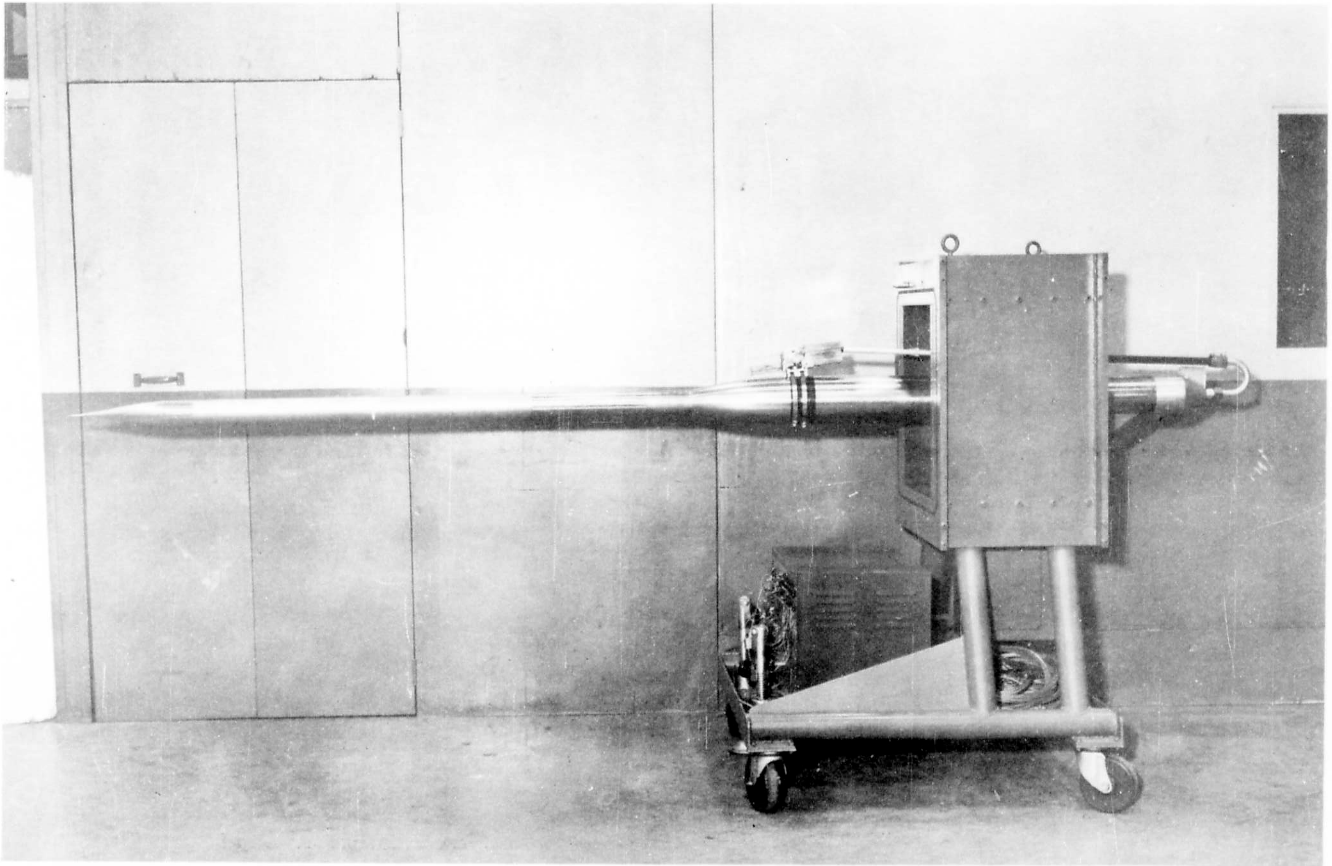


Figure 4.- Model mounted in tunnel model-support section, side view.

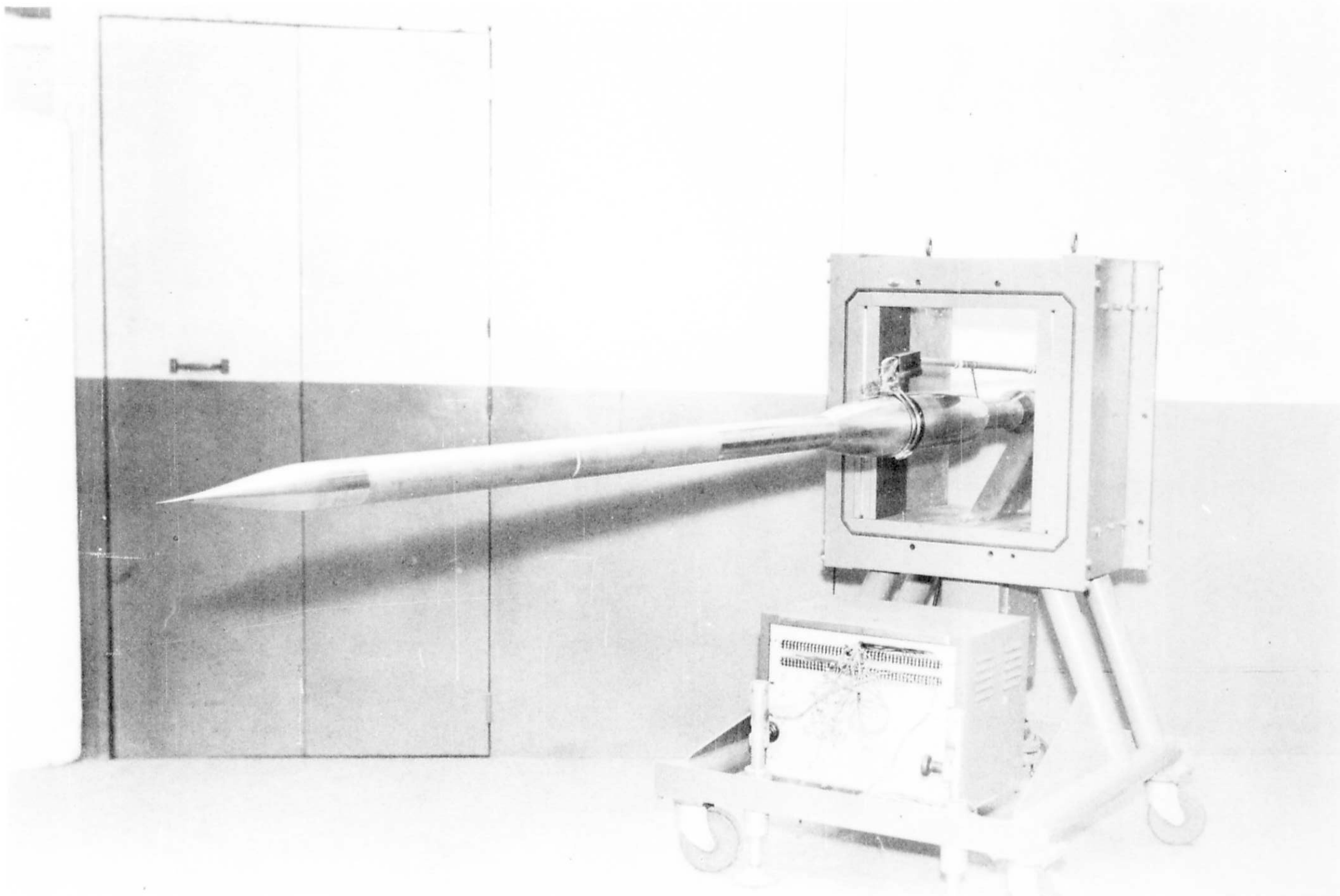


Figure 5.- Model mounted in tunnel model-support section, front view.

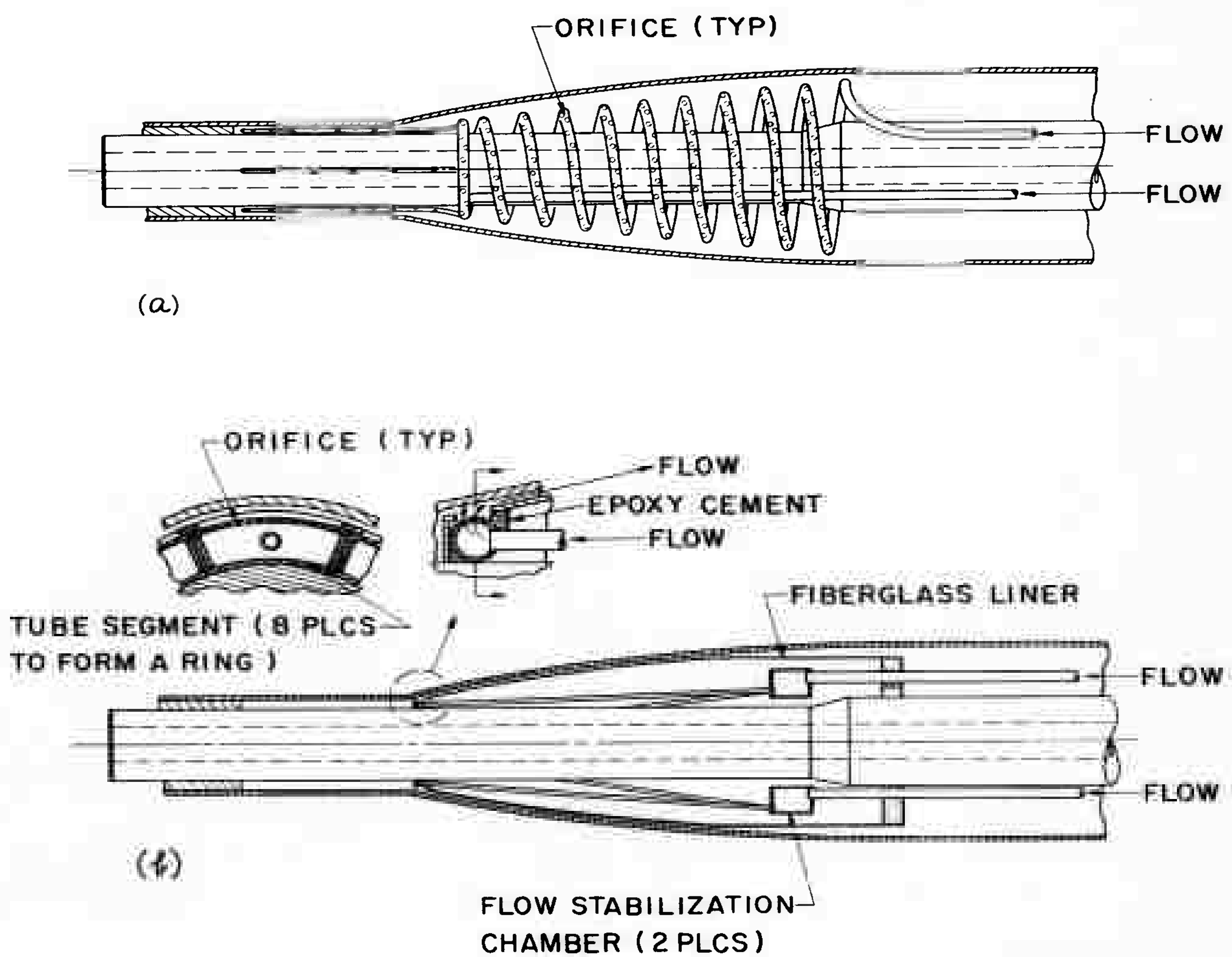


Figure 6. - The two methods used to cool the convex center section. (a) Cooling coil. (b) Fiberglass insert.

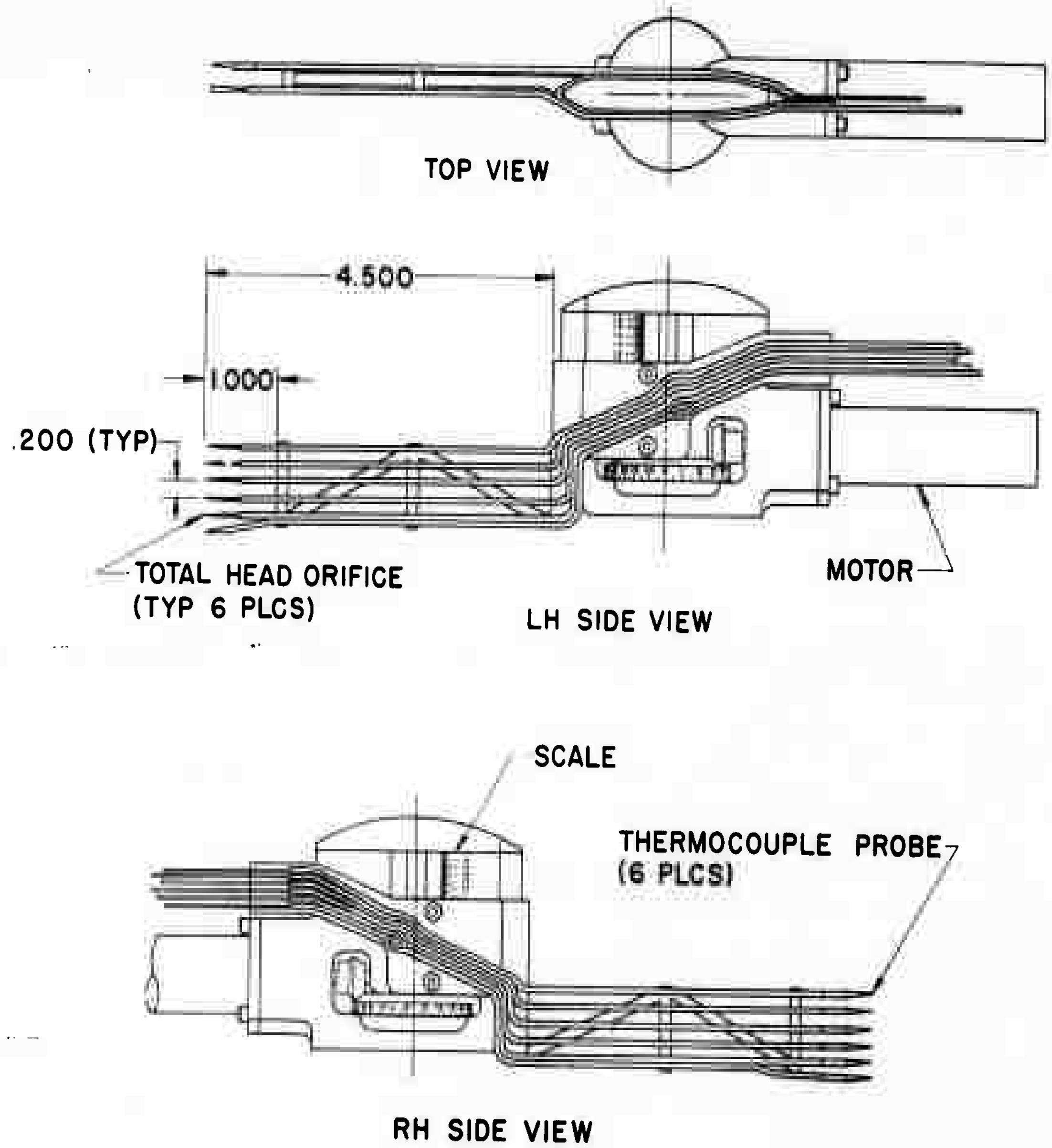


Figure 7.- Boundary-layer rake and traversing mechanism, three view.

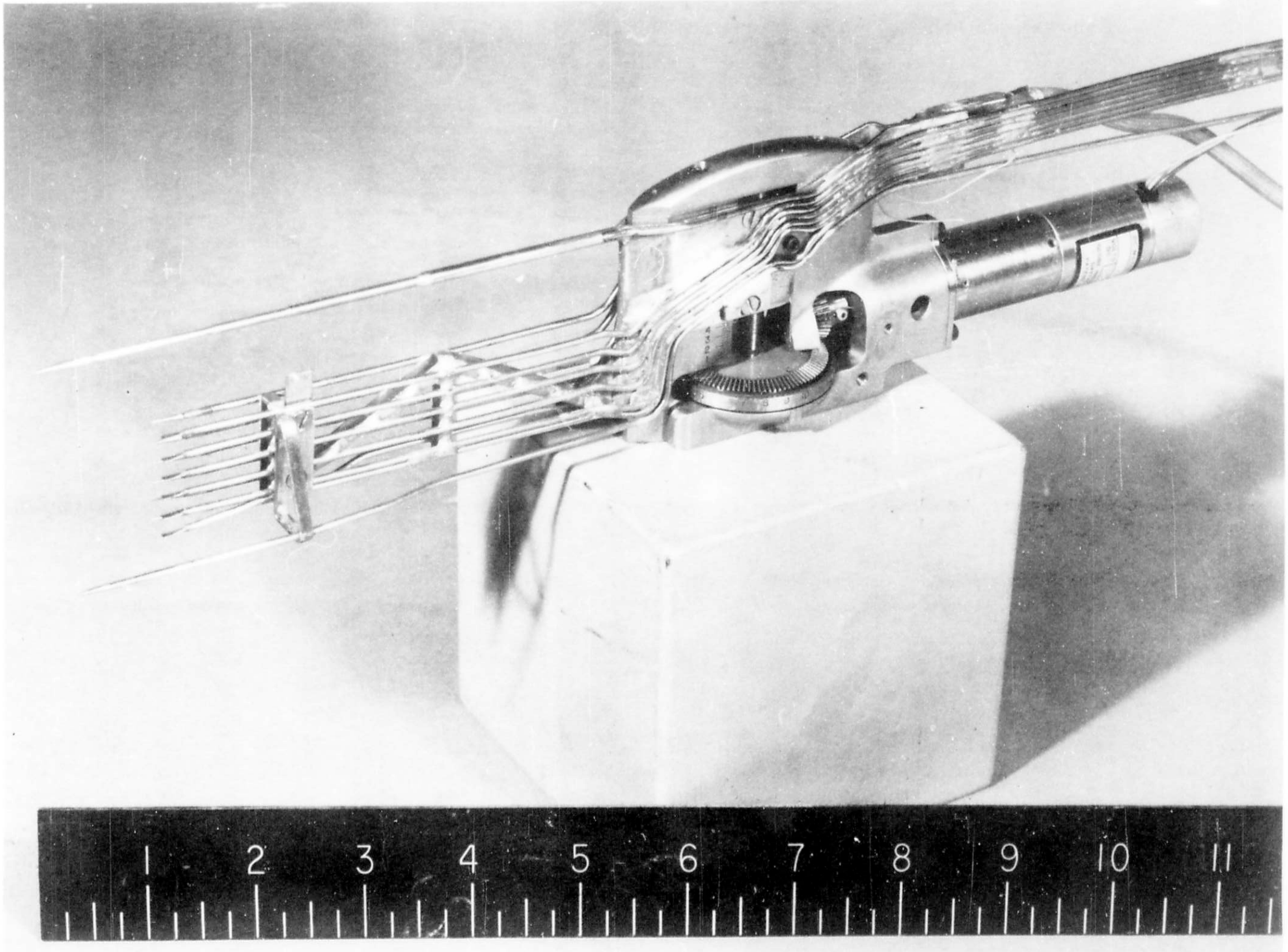


Figure 8.- Photograph of boundary-layer rake and traversing mechanism

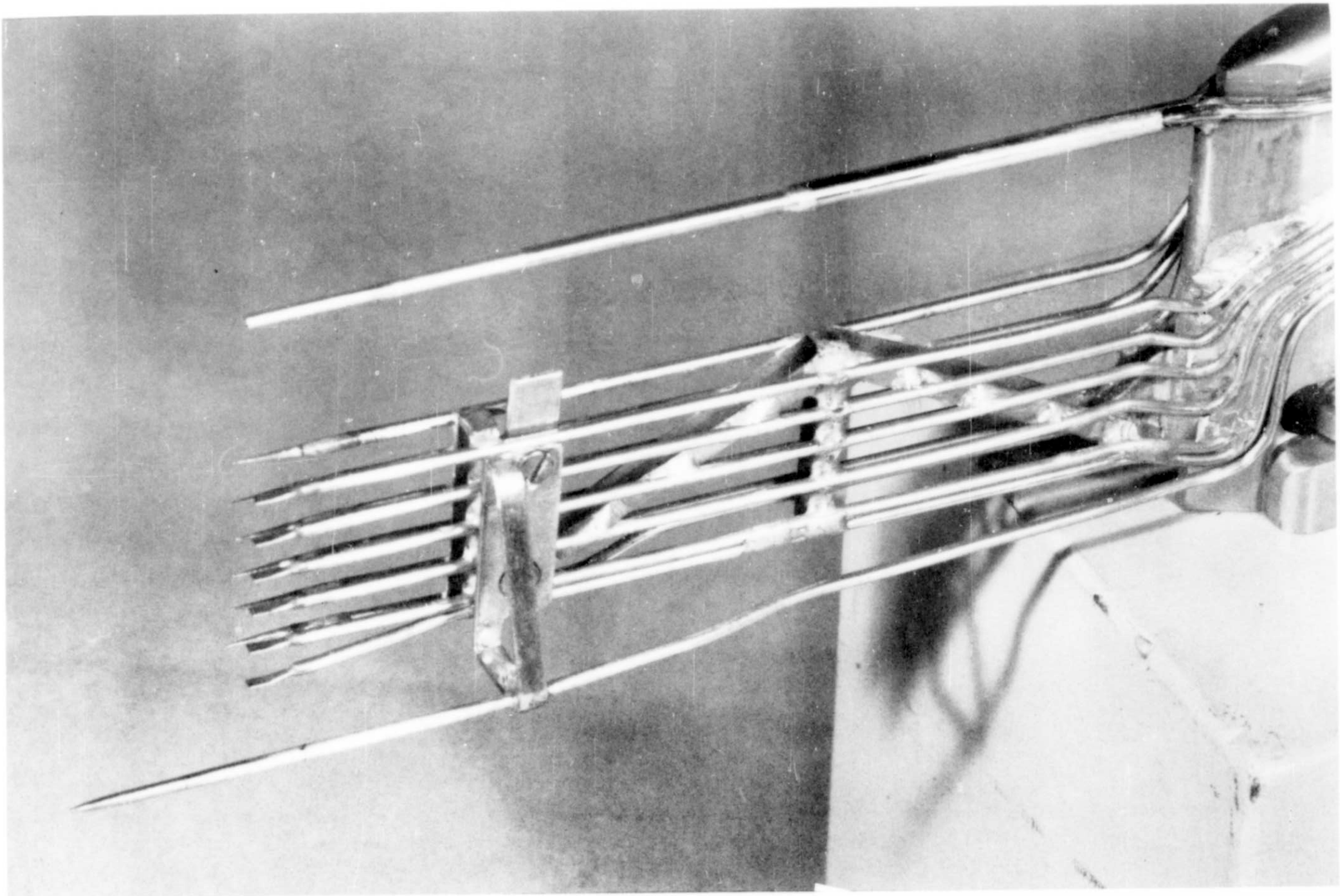


Figure 9.- Boundary-layer rake of total-pressure probes, temperature probes, and one static-pressure probe.

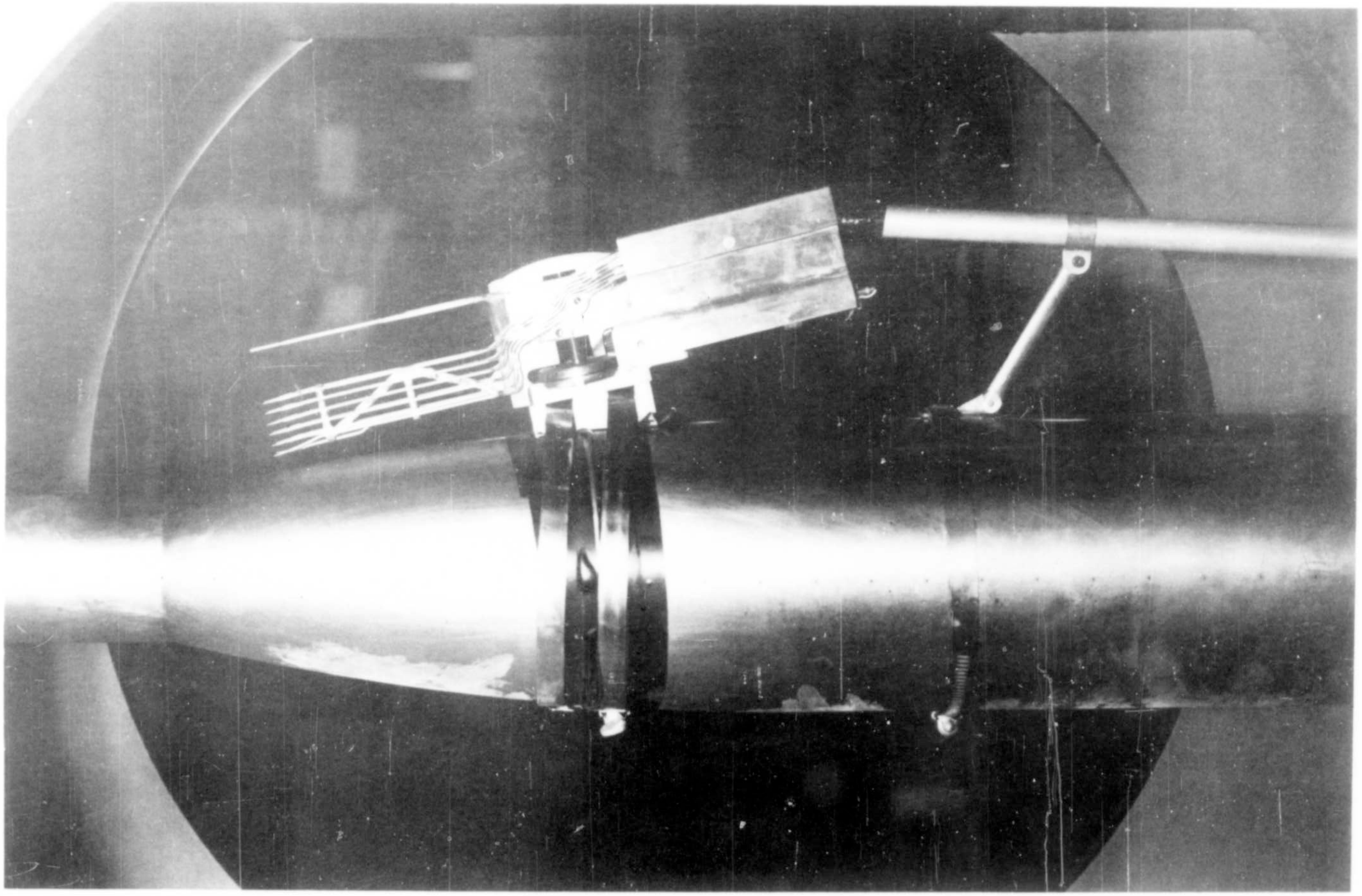


Figure 10.- Boundary-layer rake mounted at station 4 on the convex center section.

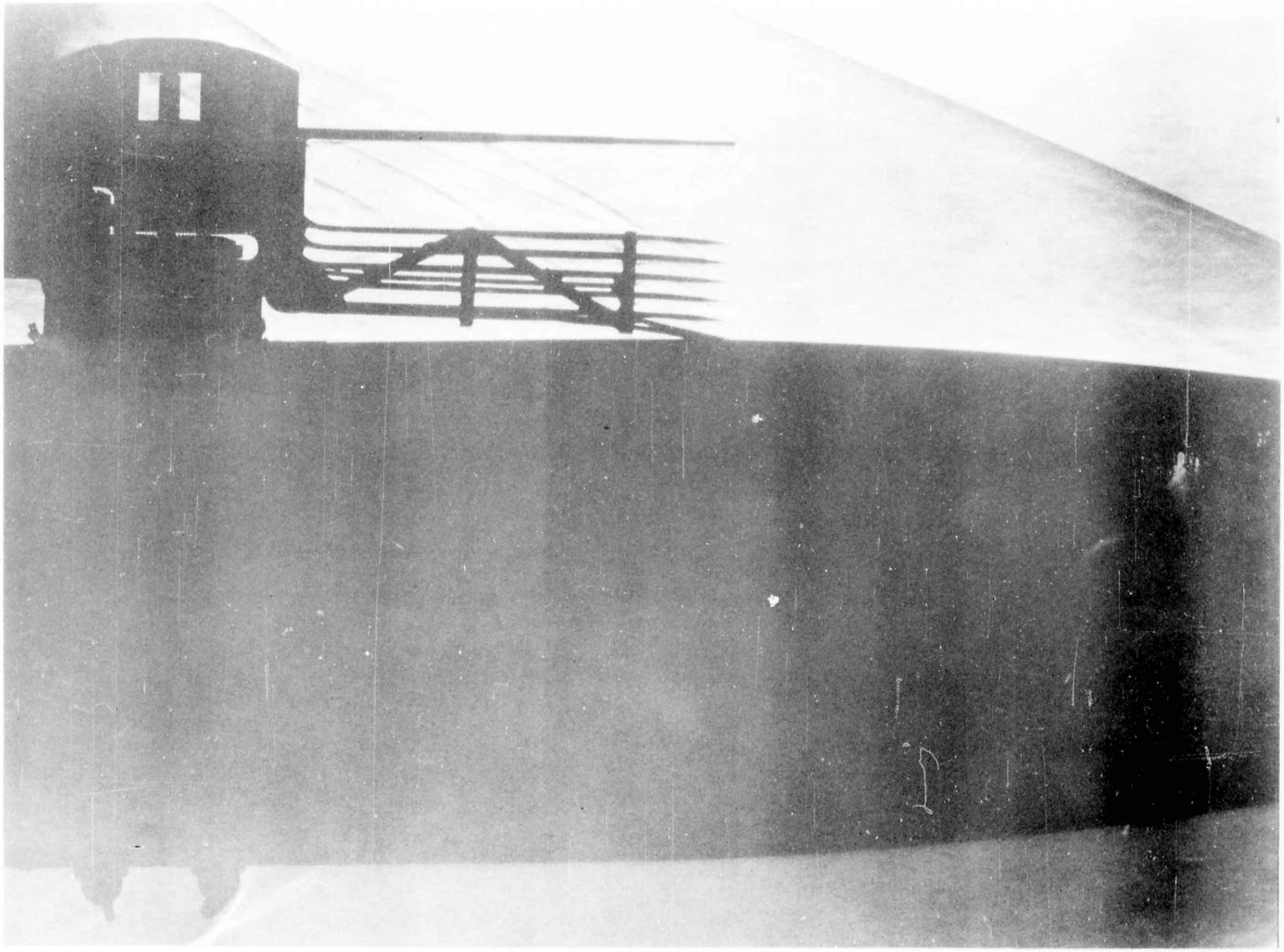


Figure 11.- Schlieren photograph of flow about rake mounted at station 10 on the convex center section. at $M_\infty = 3.30$.

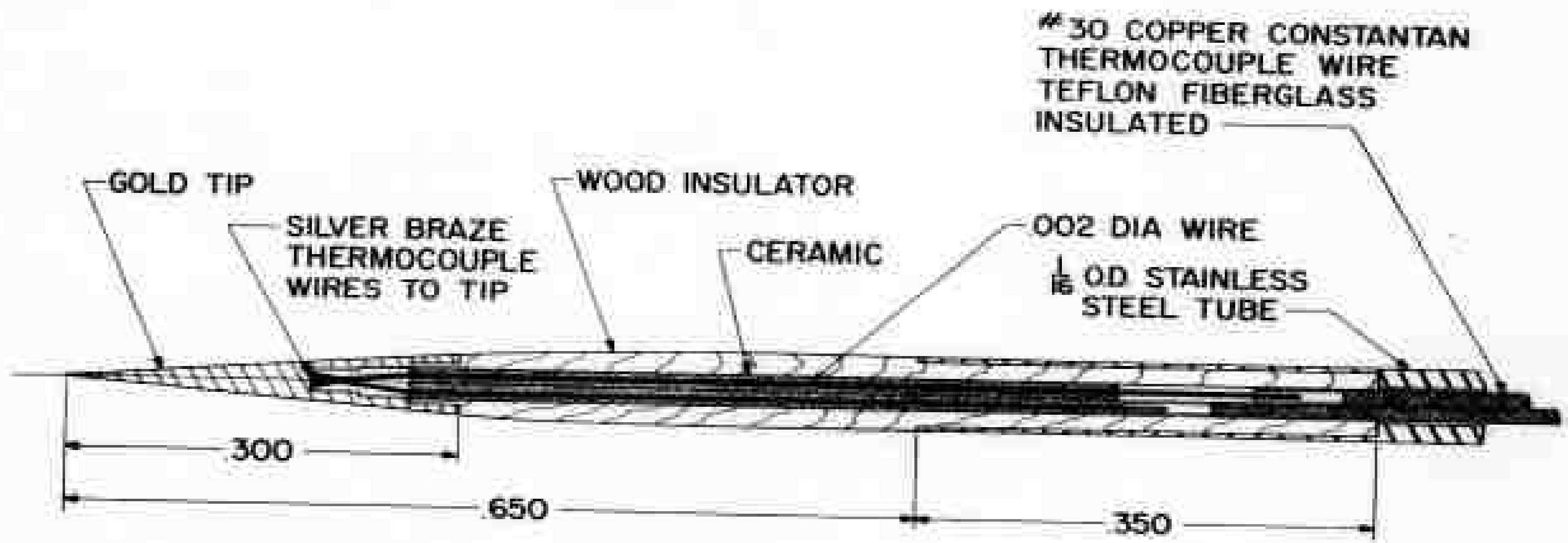


Figure 12.- Details of the equilibrium-temperature probes.

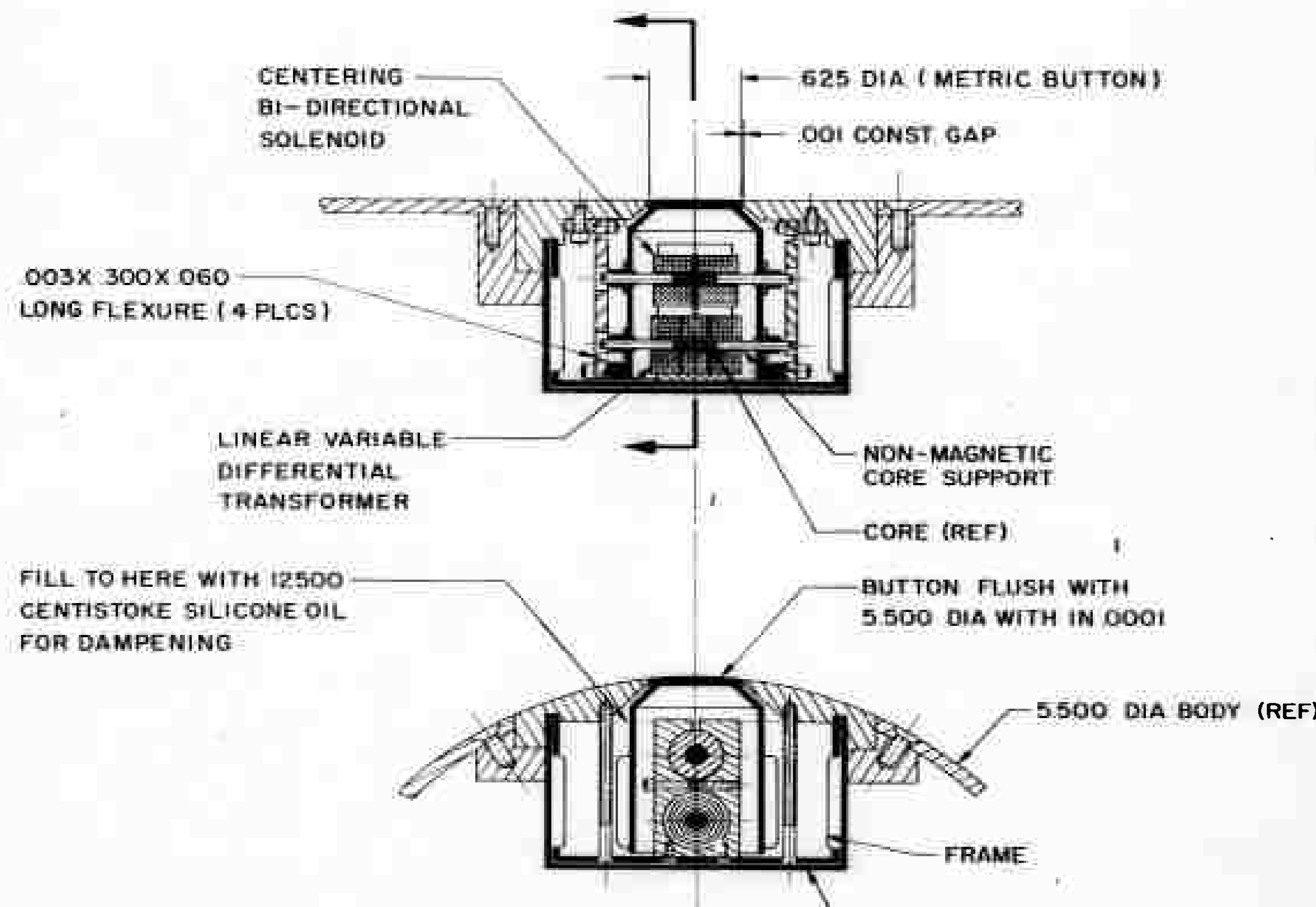


Figure 13.- Floating-element drag balance.

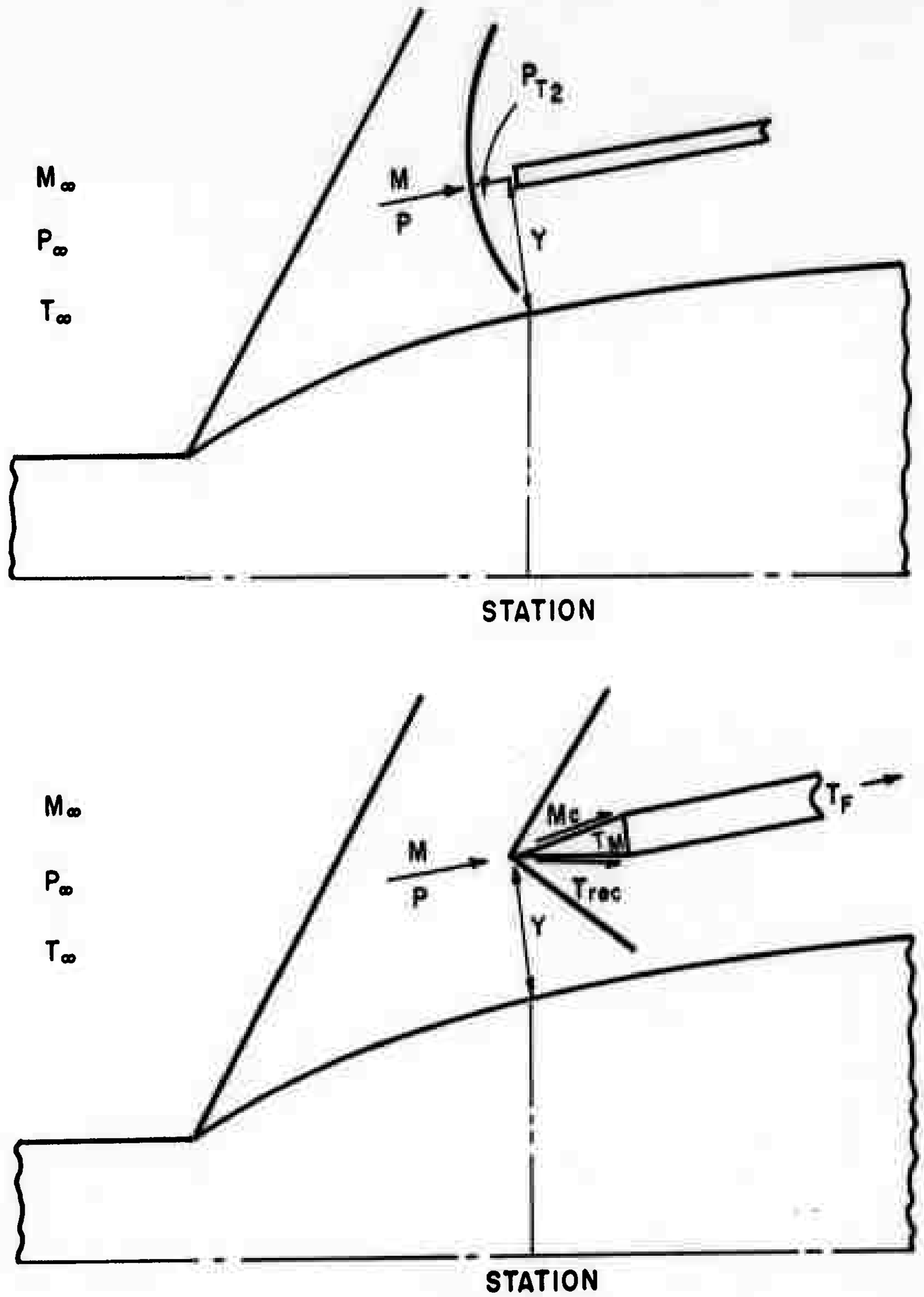


Figure 14.- Sketch of nomenclature and geometry for data reduction.

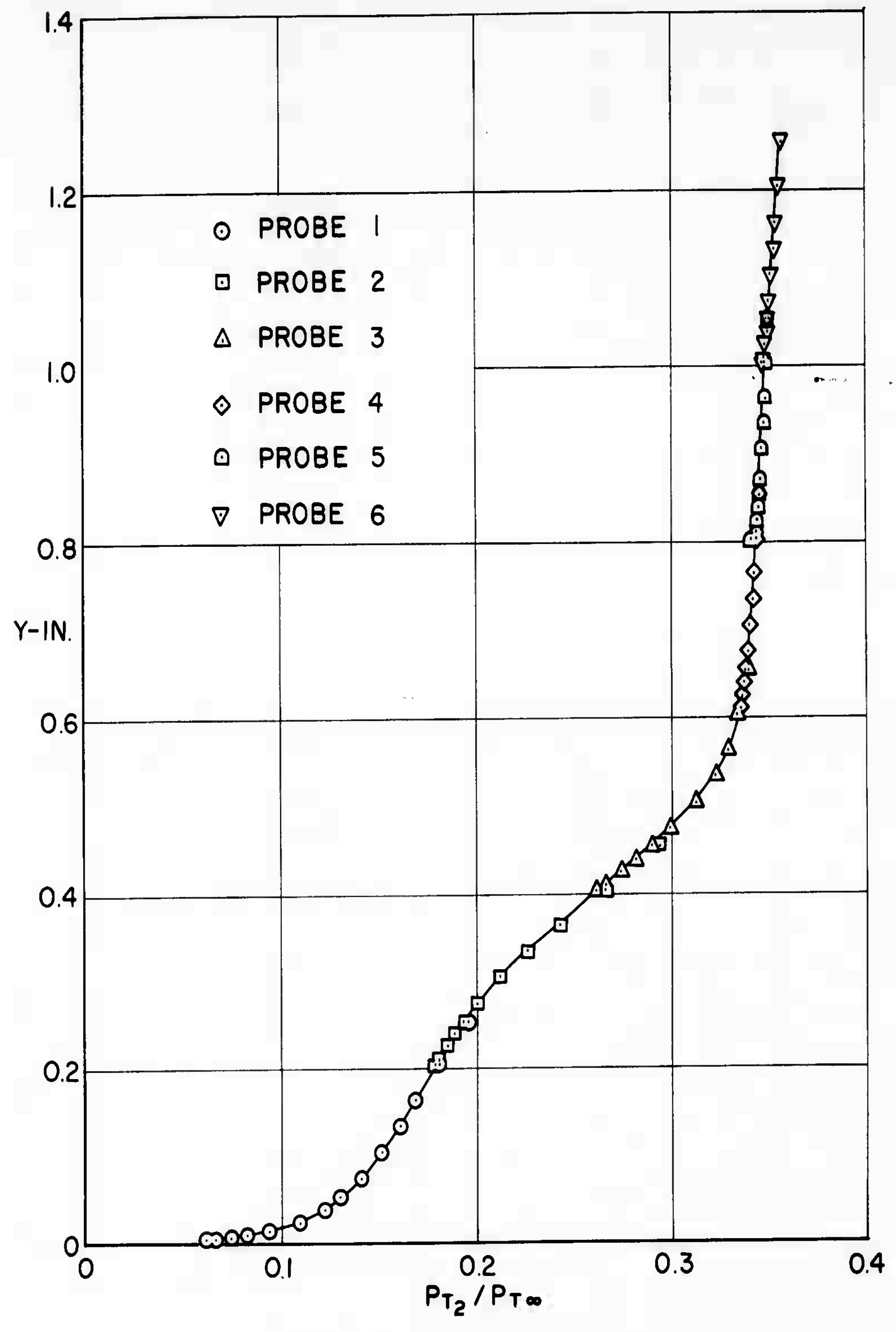


Figure 15.- Typical measured pitot-pressure distribution in the boundary layer and the faired curve used in data reduction.

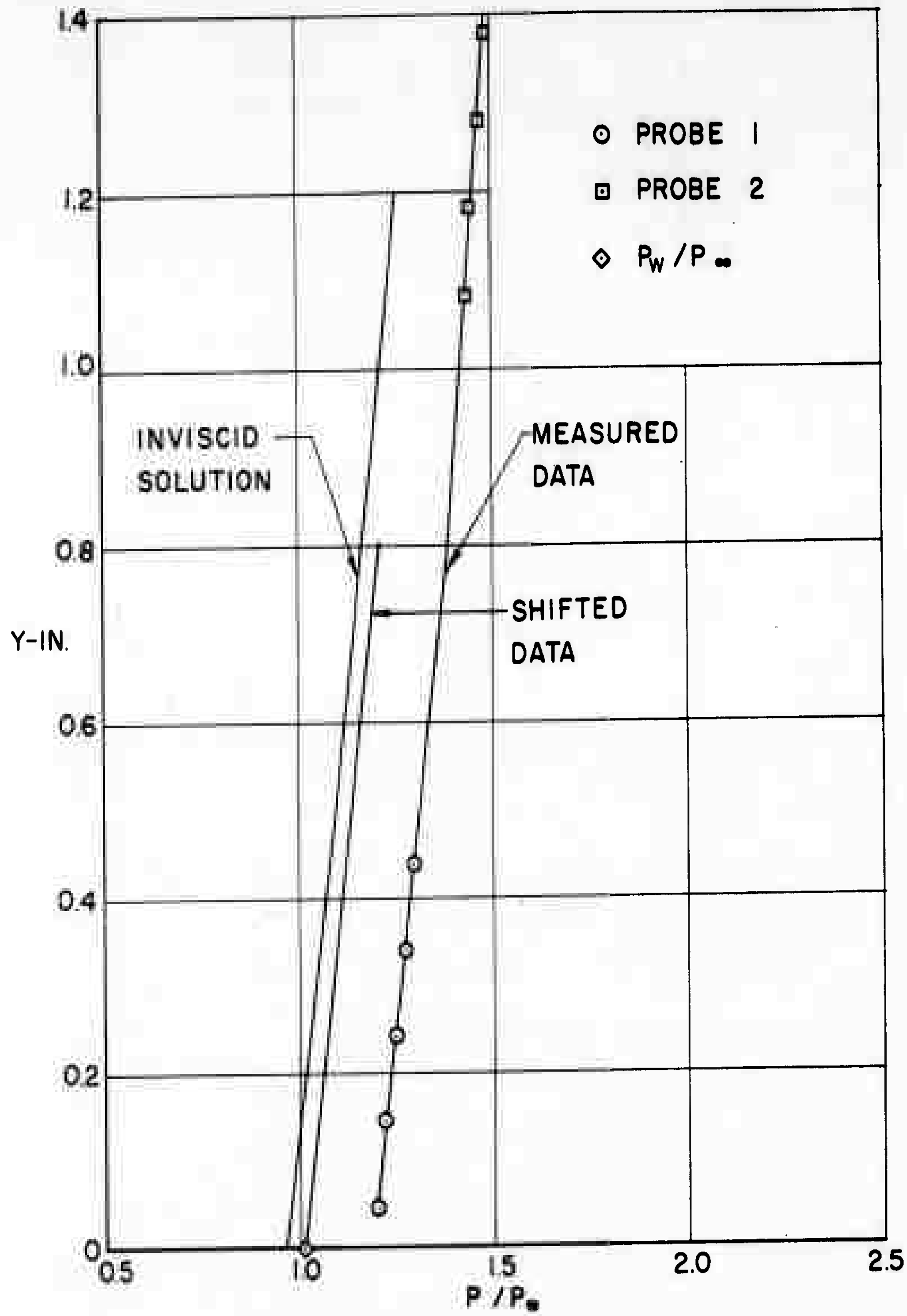


Figure 16. - Sample of measured static-pressure variation in the boundary layer together with the inviscid solution and the shifted curves used in data reduction.

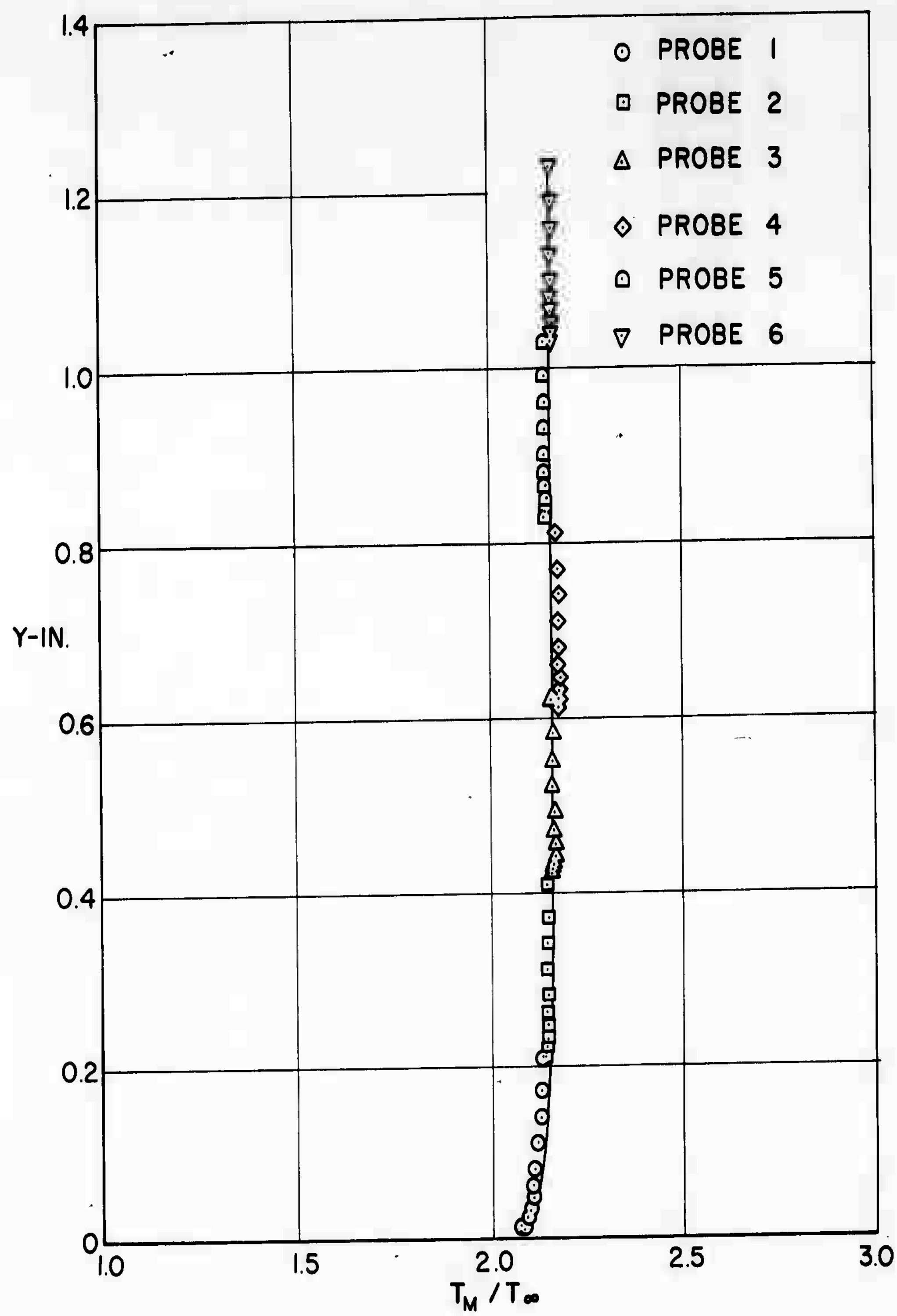
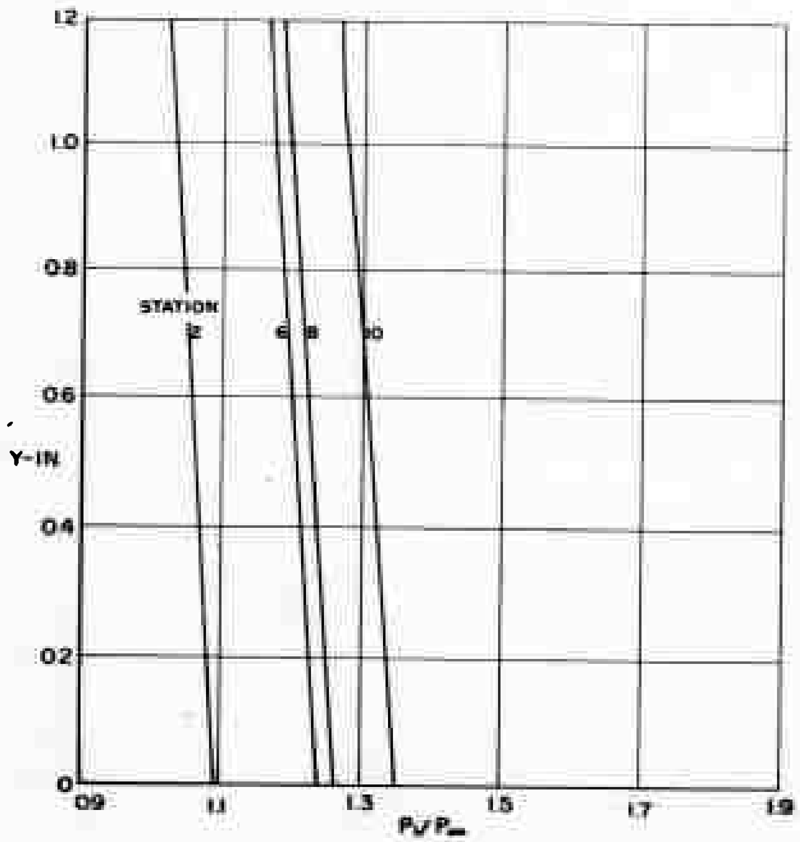
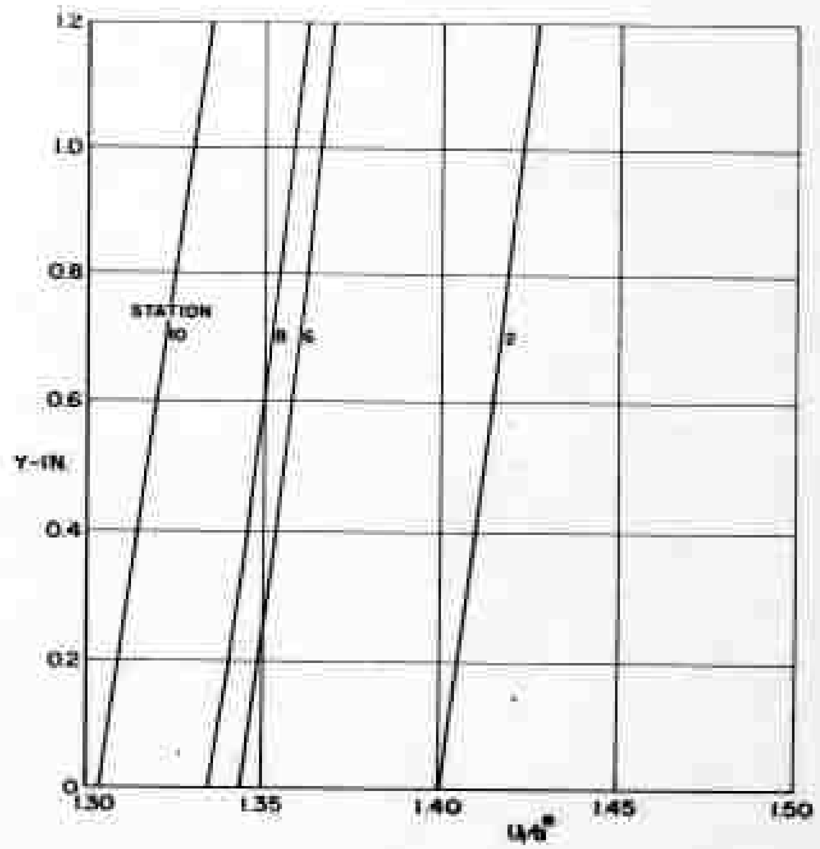


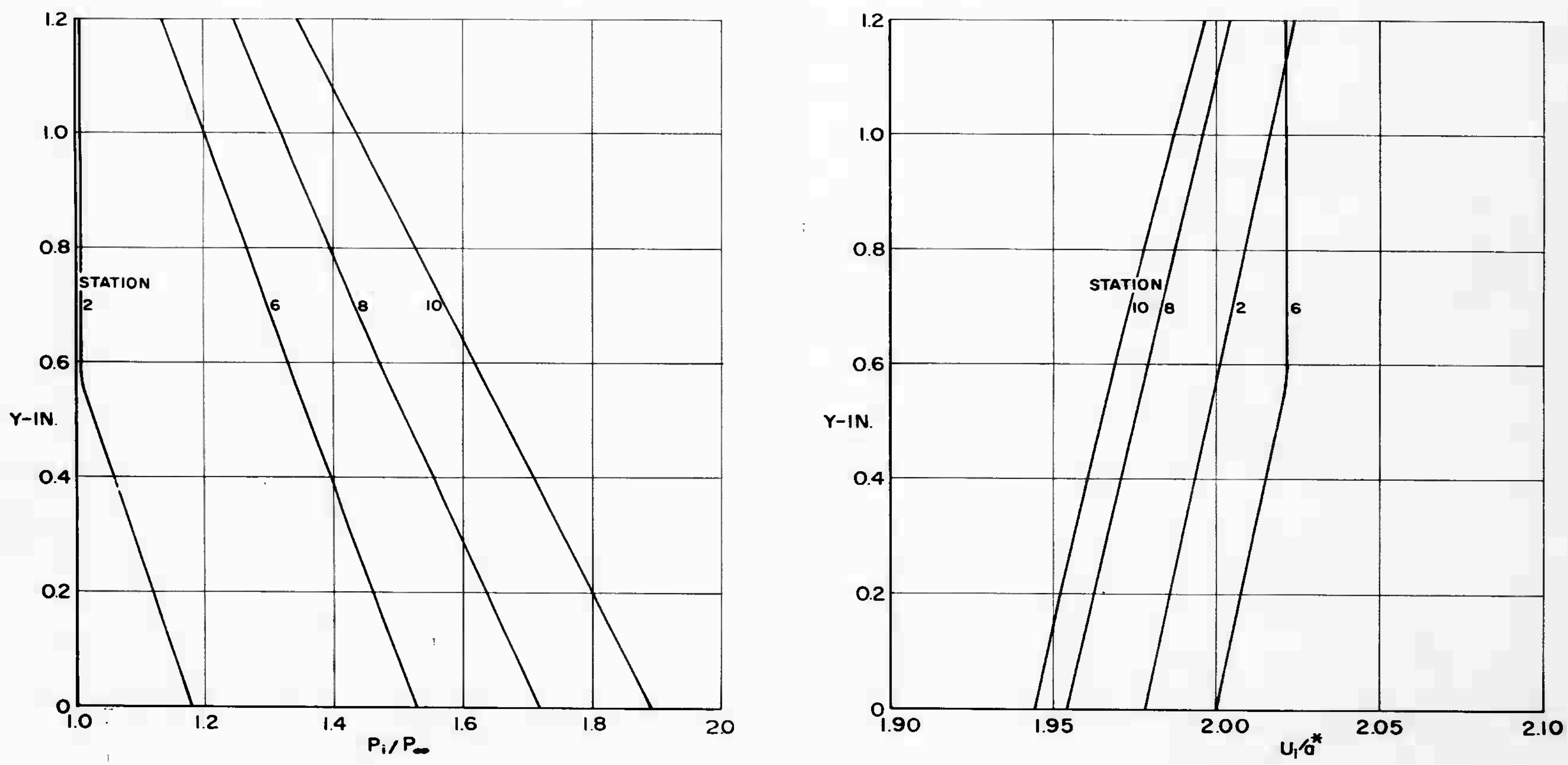
Figure 17.- Typical measured temperature distribution in the boundary layer and the faired curve used in data reduction.





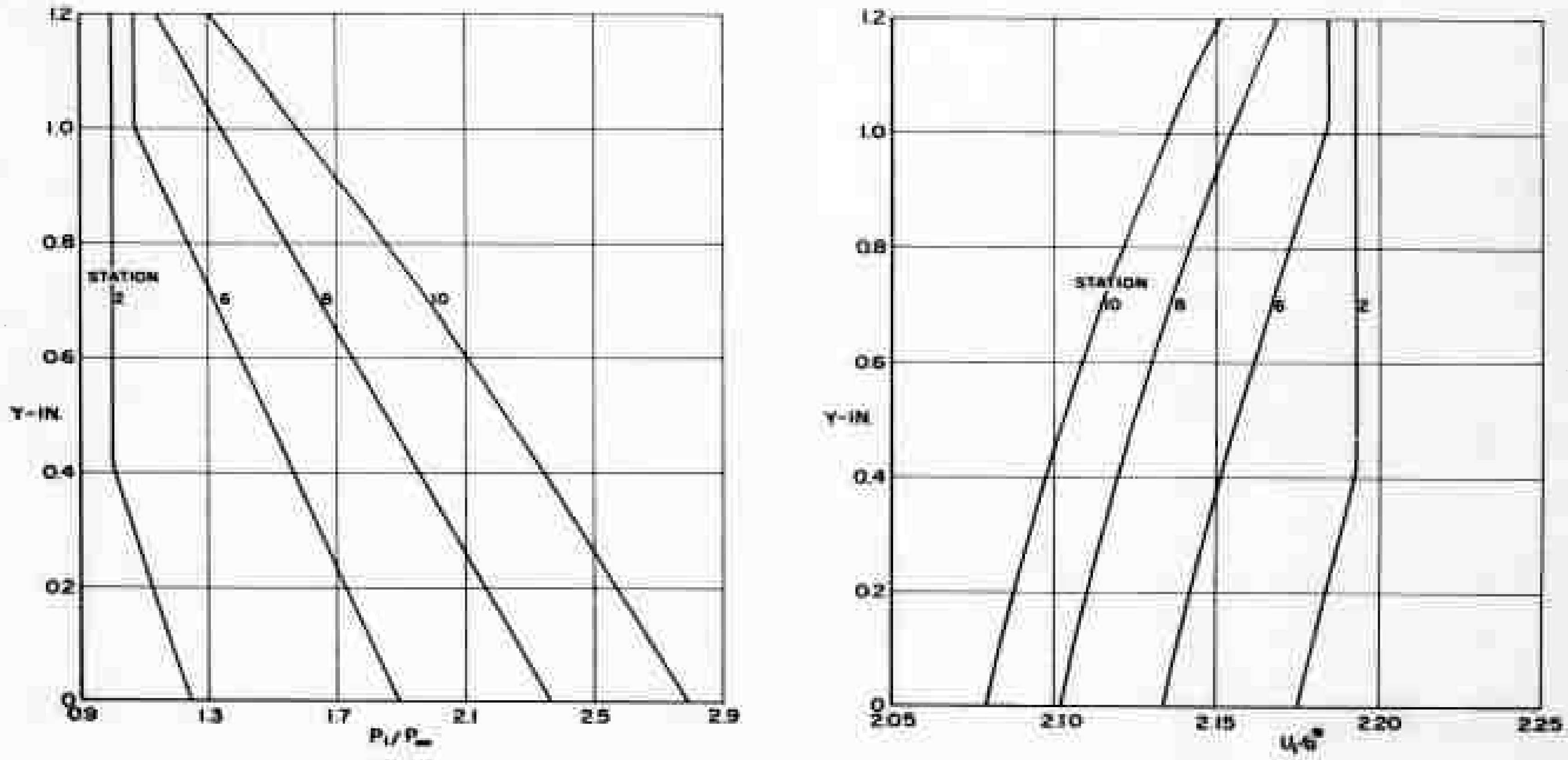
(a) Concave center section, $M_\infty = 1.61$.

Figure 18.- Inviscid static-pressure and velocity profiles used in data reduction.



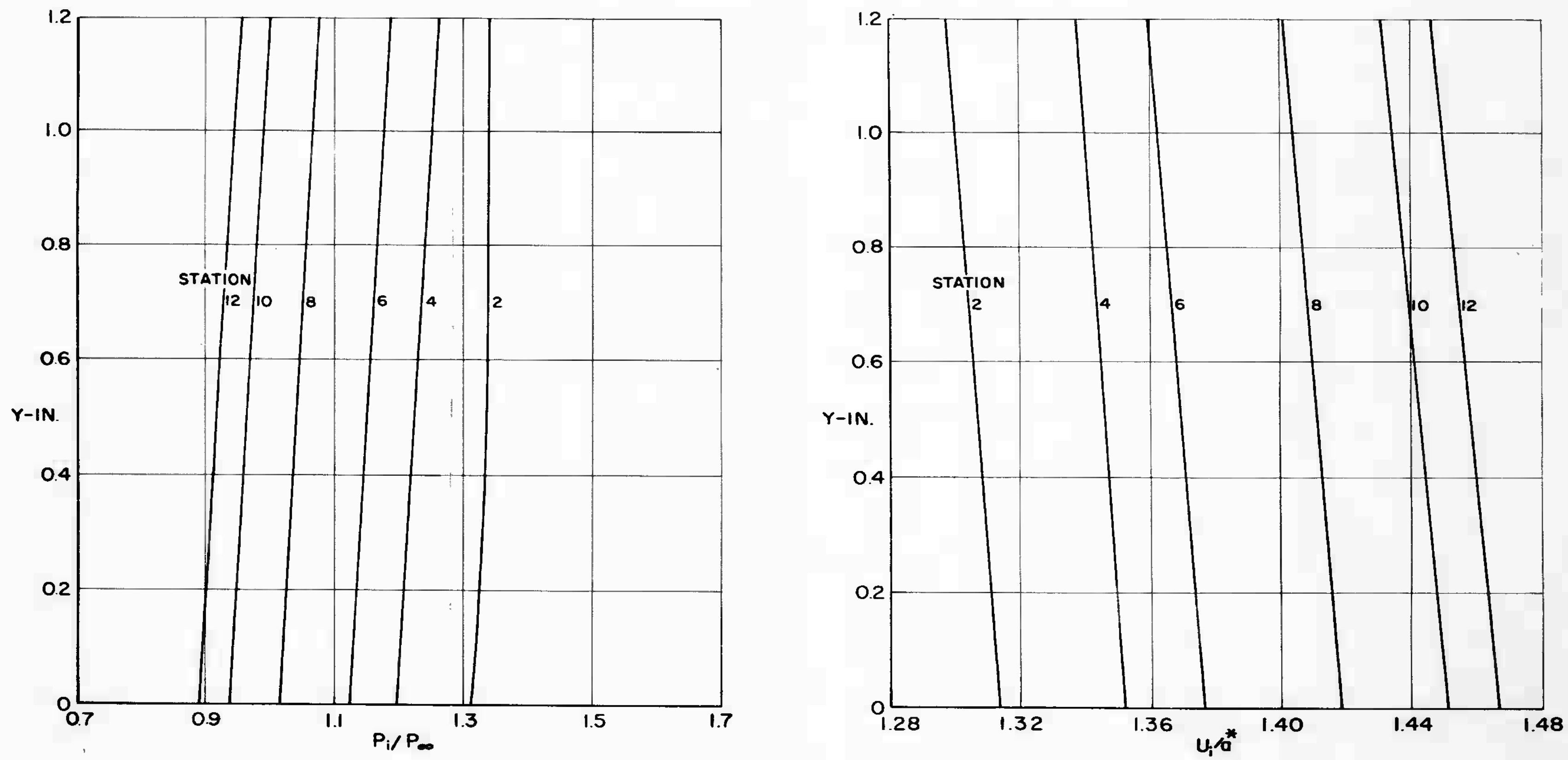
(b) Concave center section, $M_\infty = 3.30$.

Figure 18.- Continued.



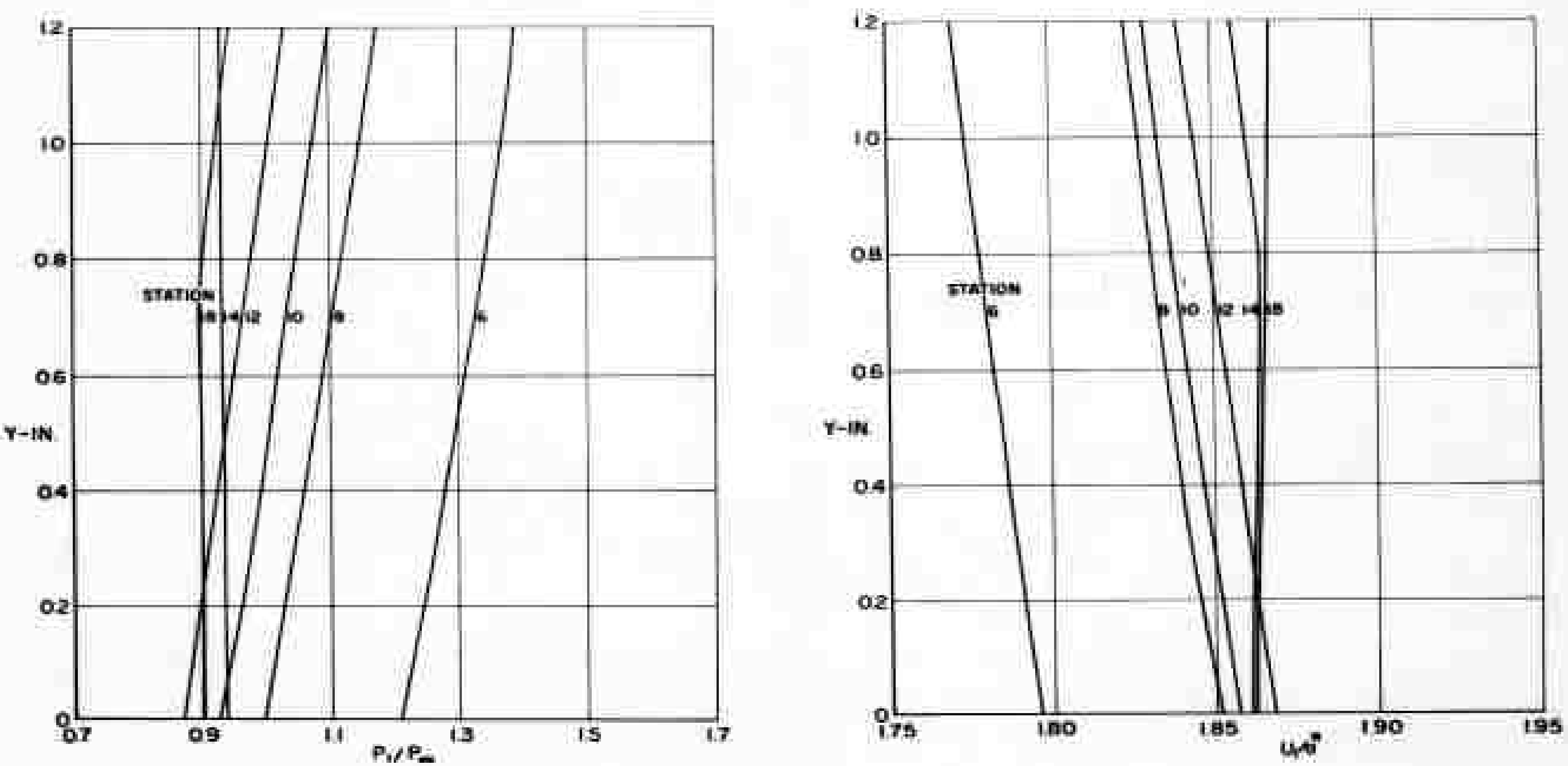
(c) Concave center section, $M_\infty = 4.50$.

Figure 18.- Continued.



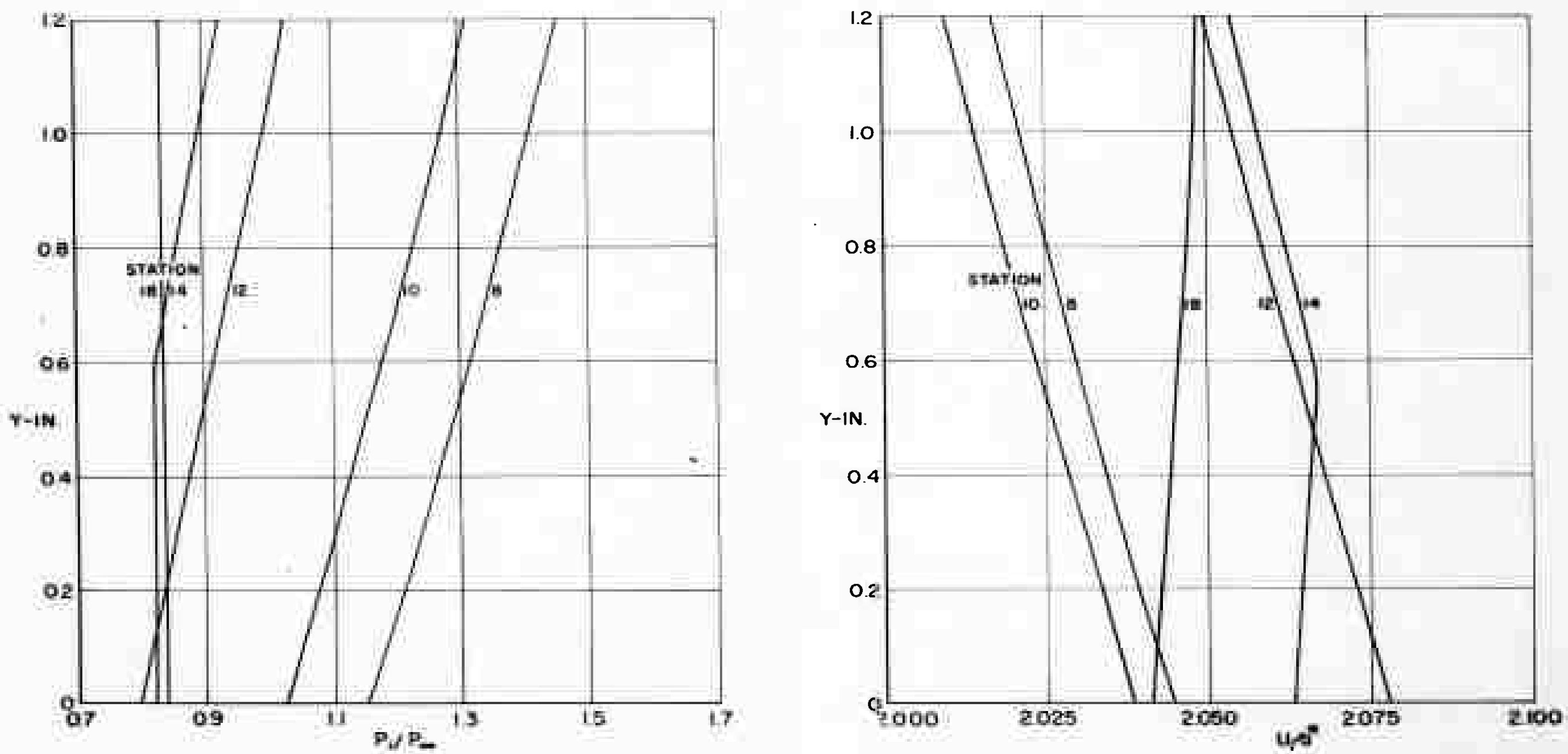
(d) Convex center section, $M_\infty = 1.61$.

Figure 18.- Continued.



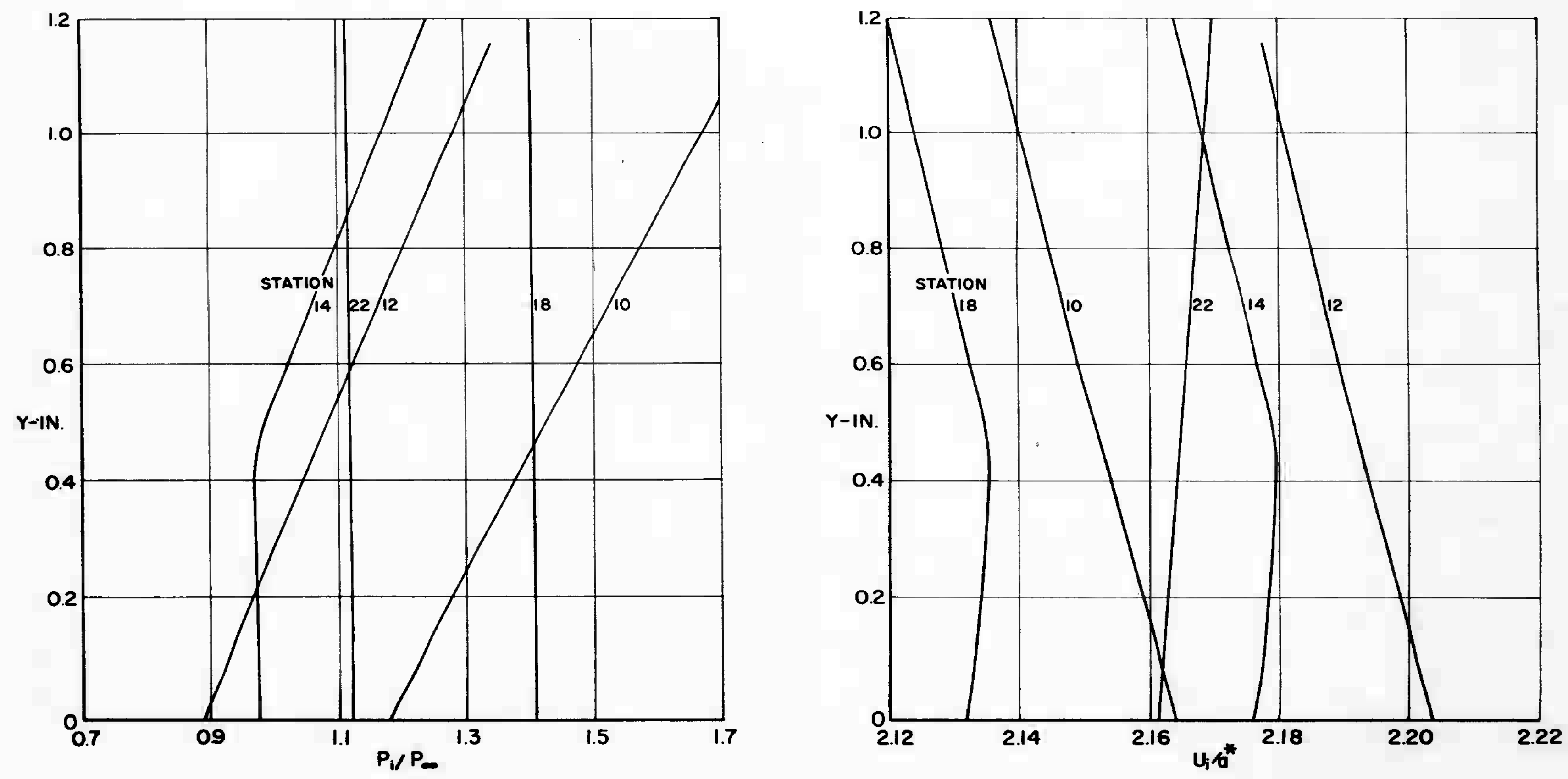
(e) Convex center section, $M_\infty = 2.58$.

Figure 18.- Continued.



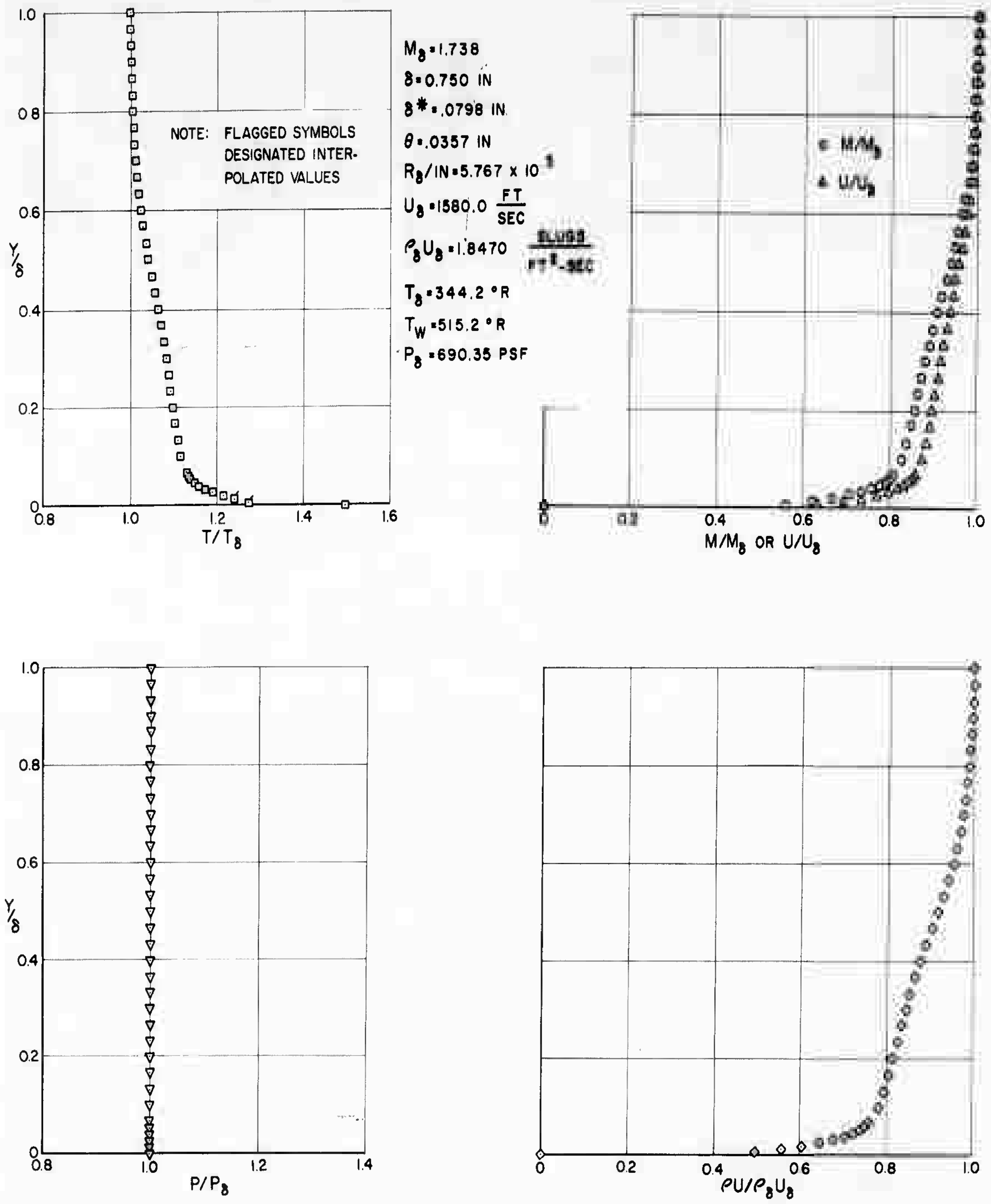
(f) Convex center section, $M_\infty = 3.30$.

Figure 18.- Continued.



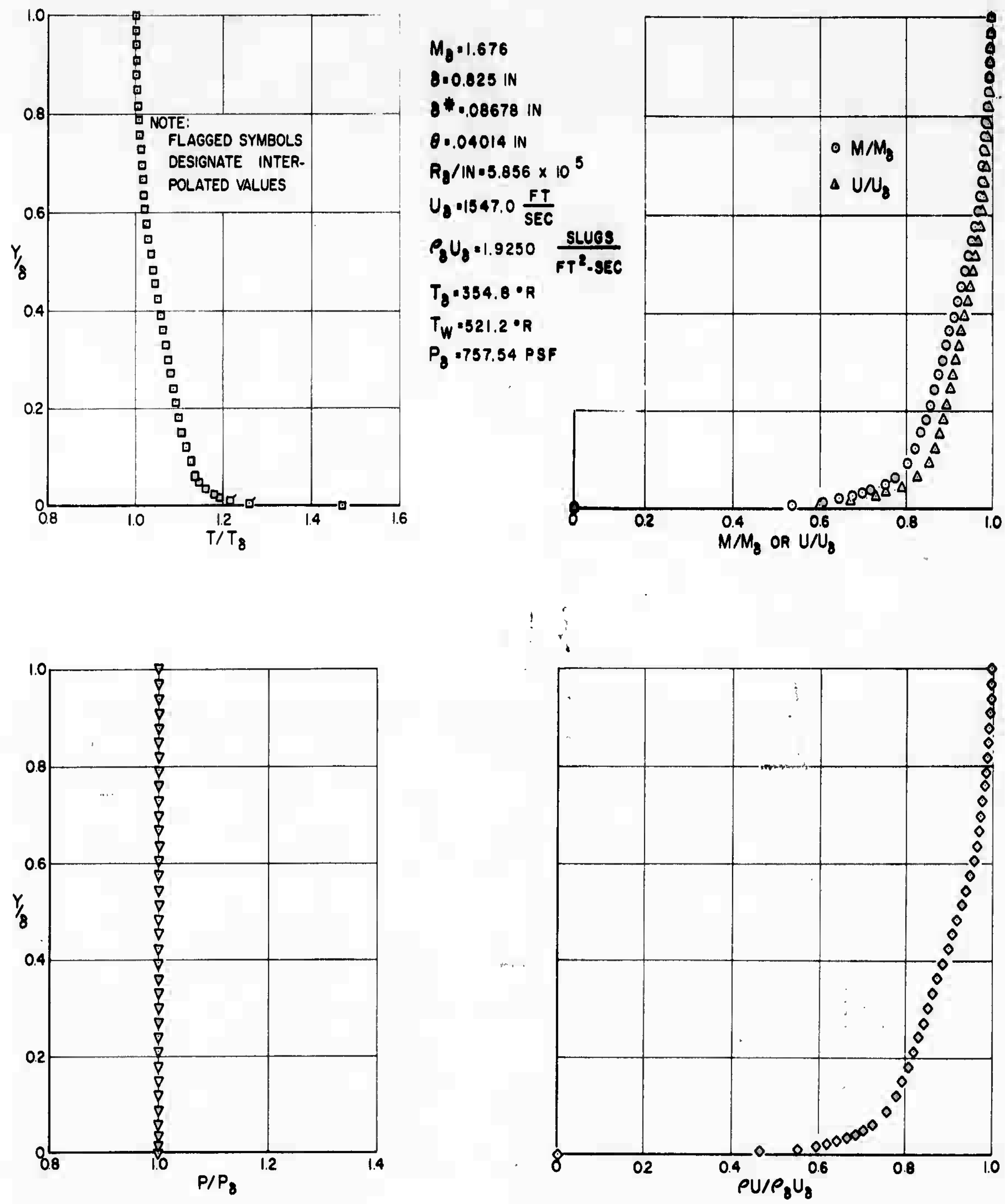
(g) Convex center section, $M_\infty = 4.50$.

Figure 18.- Concluded.



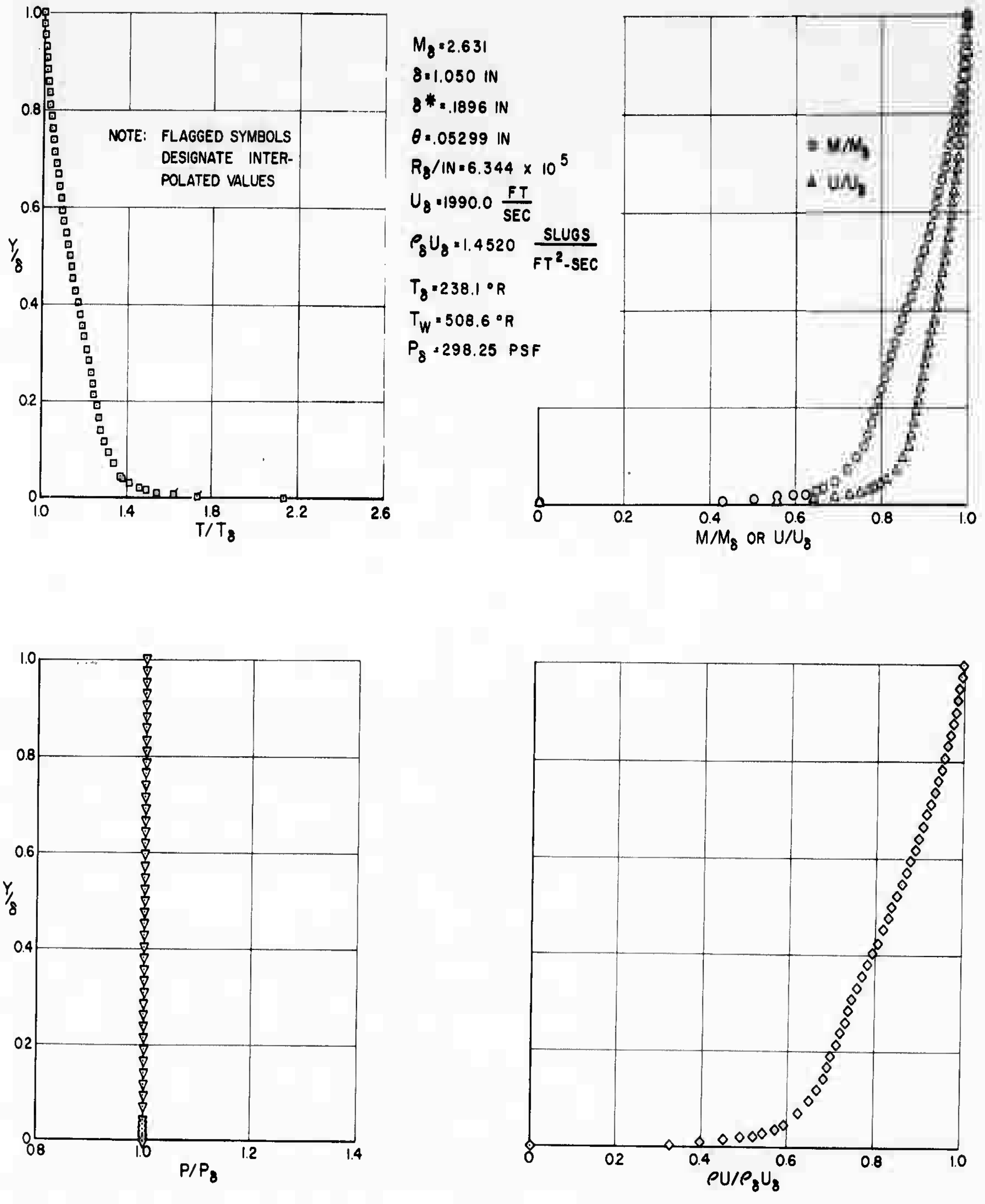
(a) $M_\infty = 1.61$, Station 4, $T_W/T_\delta = 1.496$.

Figure 19.- Profiles of temperature, velocity, Mach number, static pressure, and mass flow for the blunt center section.



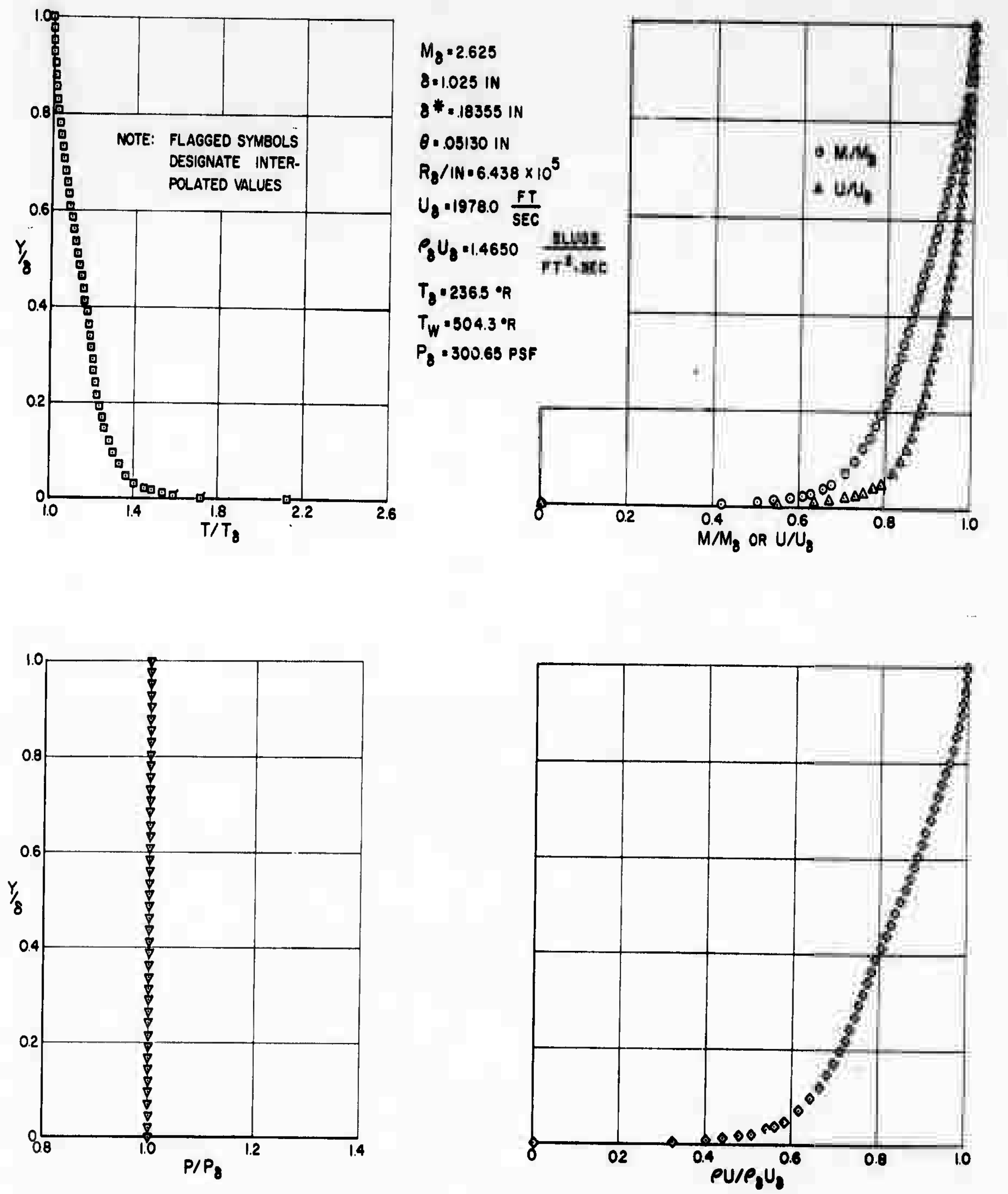
(b) $M_\infty = 1.61$, Station 6, $T_W/T_\delta = 1.468$.

Figure 19.- Continued.



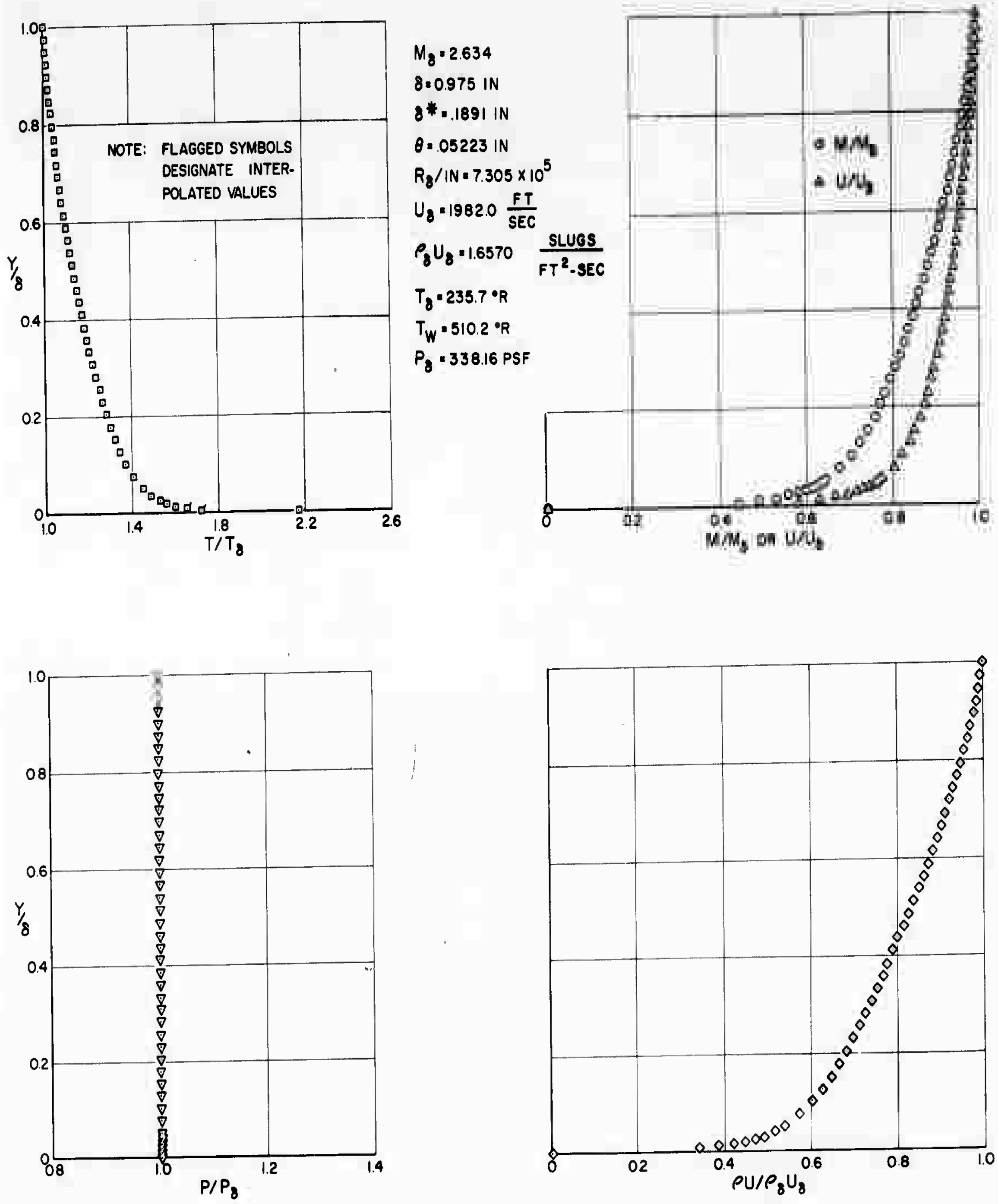
(c) $M_\infty = 2.58$, Station 6, $T_W/T_\delta = 2.136$.

Figure 19.- Continued.



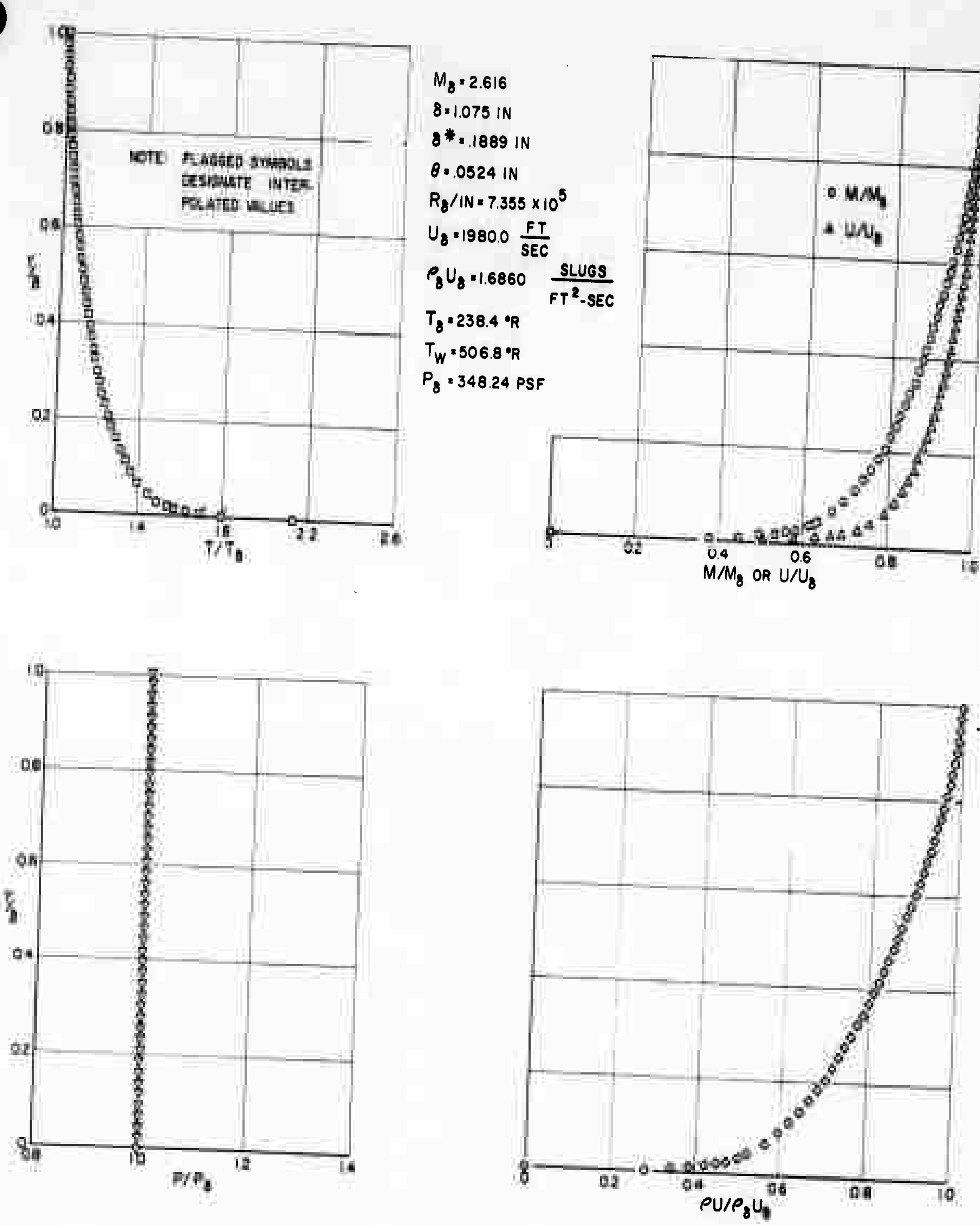
(d) $M_\infty = 2.58$, Station 8, $T_W/T_\delta = 2.132$.

Figure 19.- Continued.



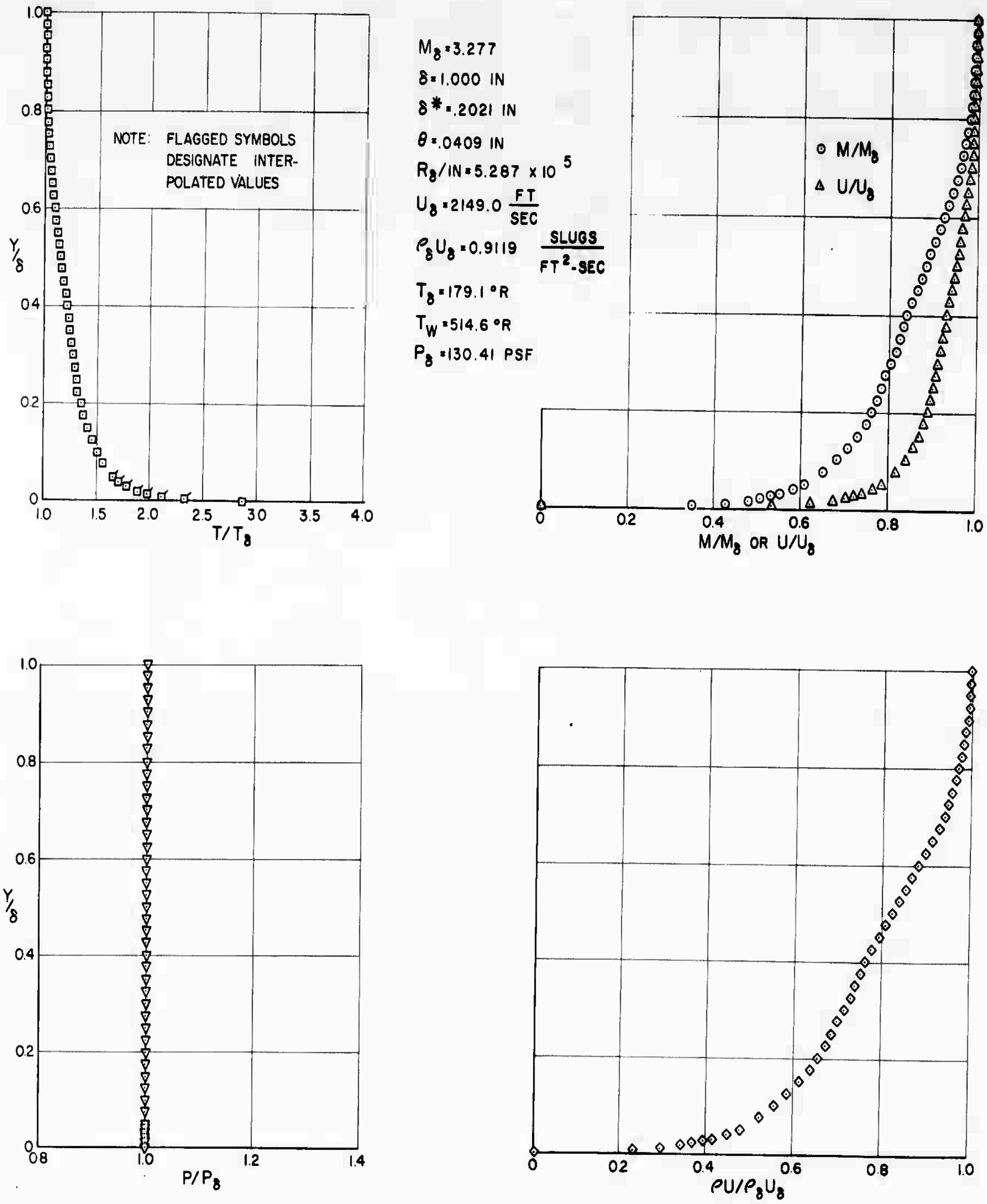
(e) $M_\infty = 2.58$, Station 12, $T_W/T_\delta = 2.164$.

Figure 19.- Continued.



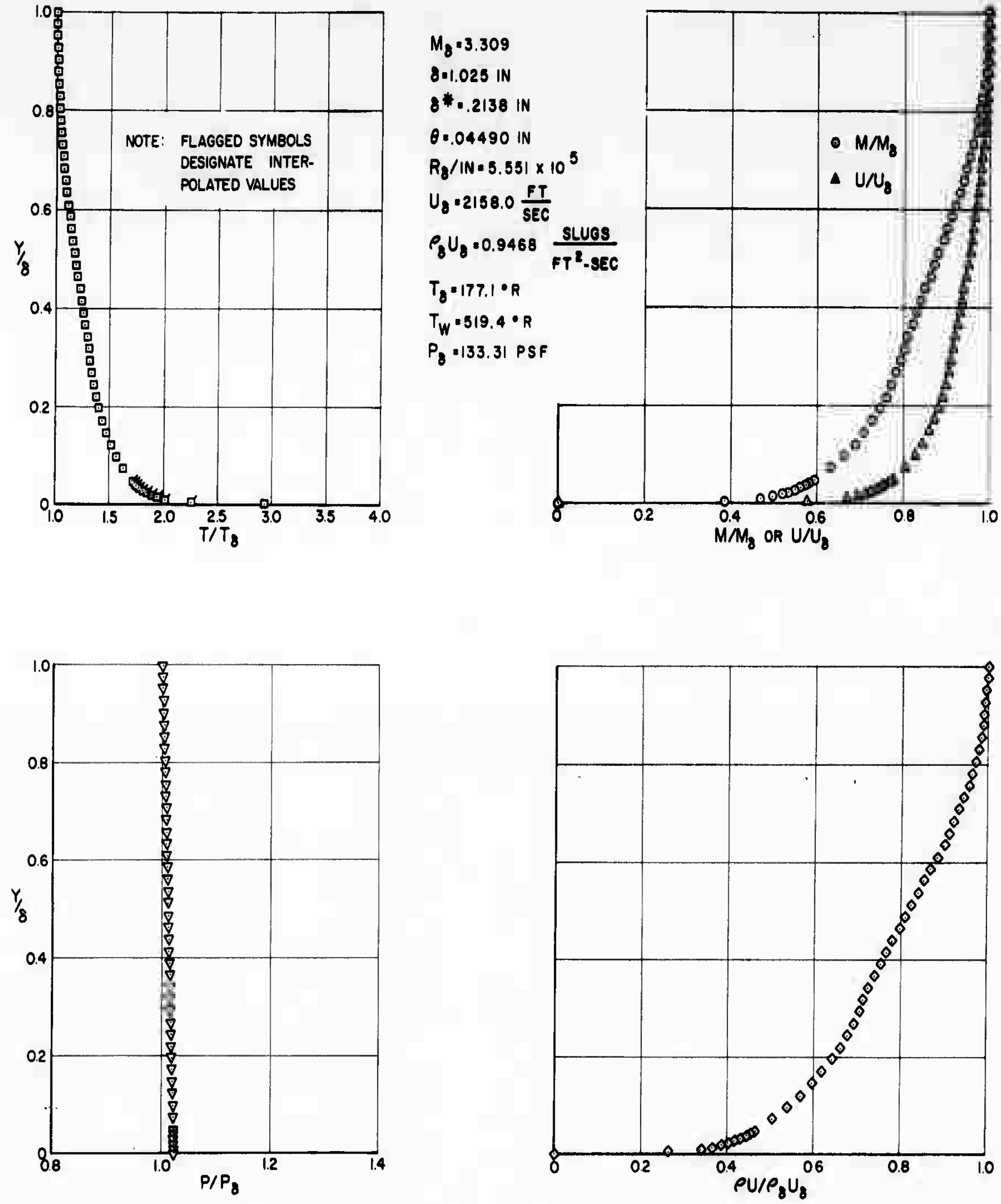
(f) $M_\infty = 2.58$, Station 14, $T_W/T_\delta = 2.125$.

Figure 19.- Continued.



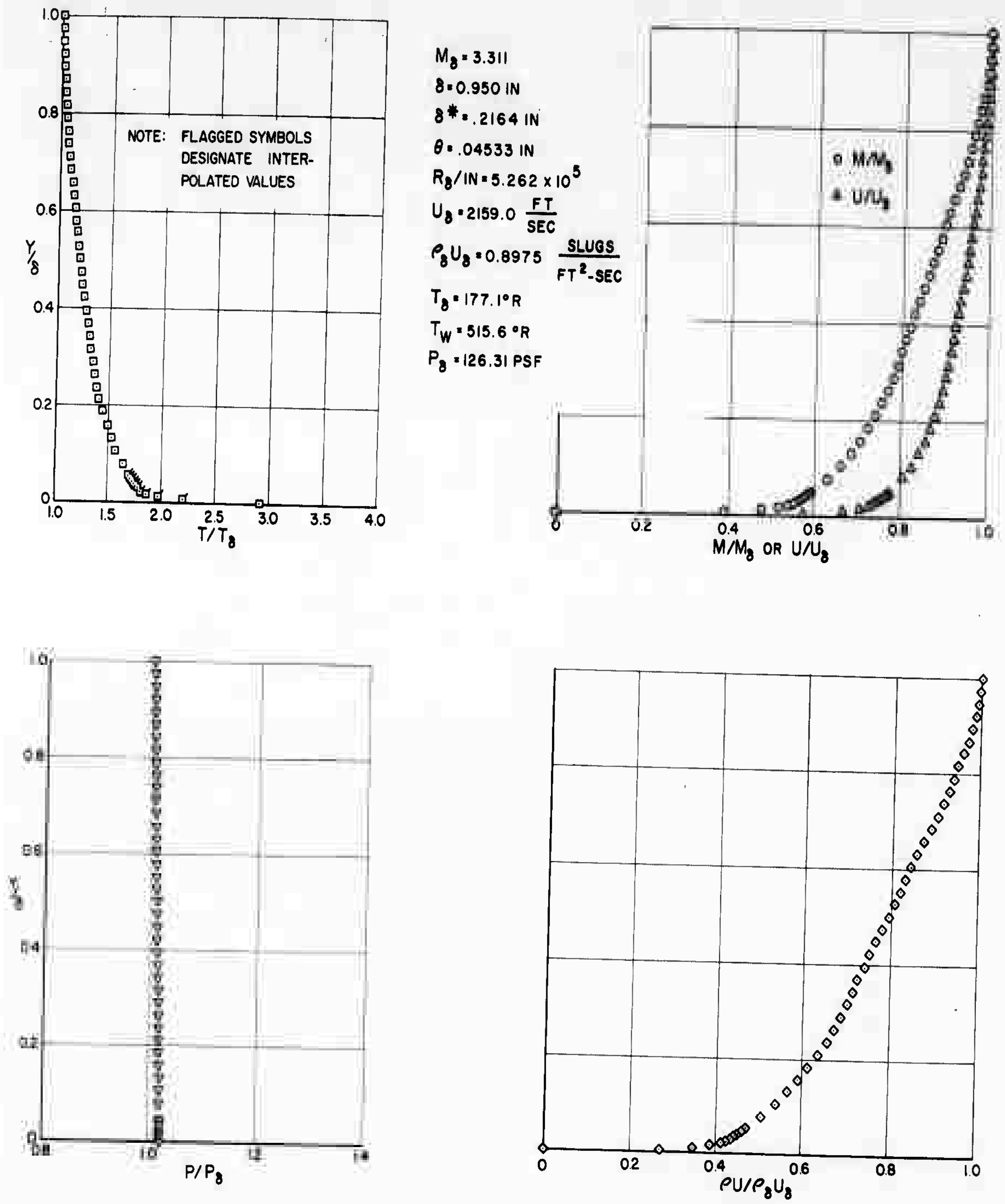
(g) $M_\infty = 3.30$, Station 10, $T_W/T_\delta = 2.873$.

Figure 19.- Continued.



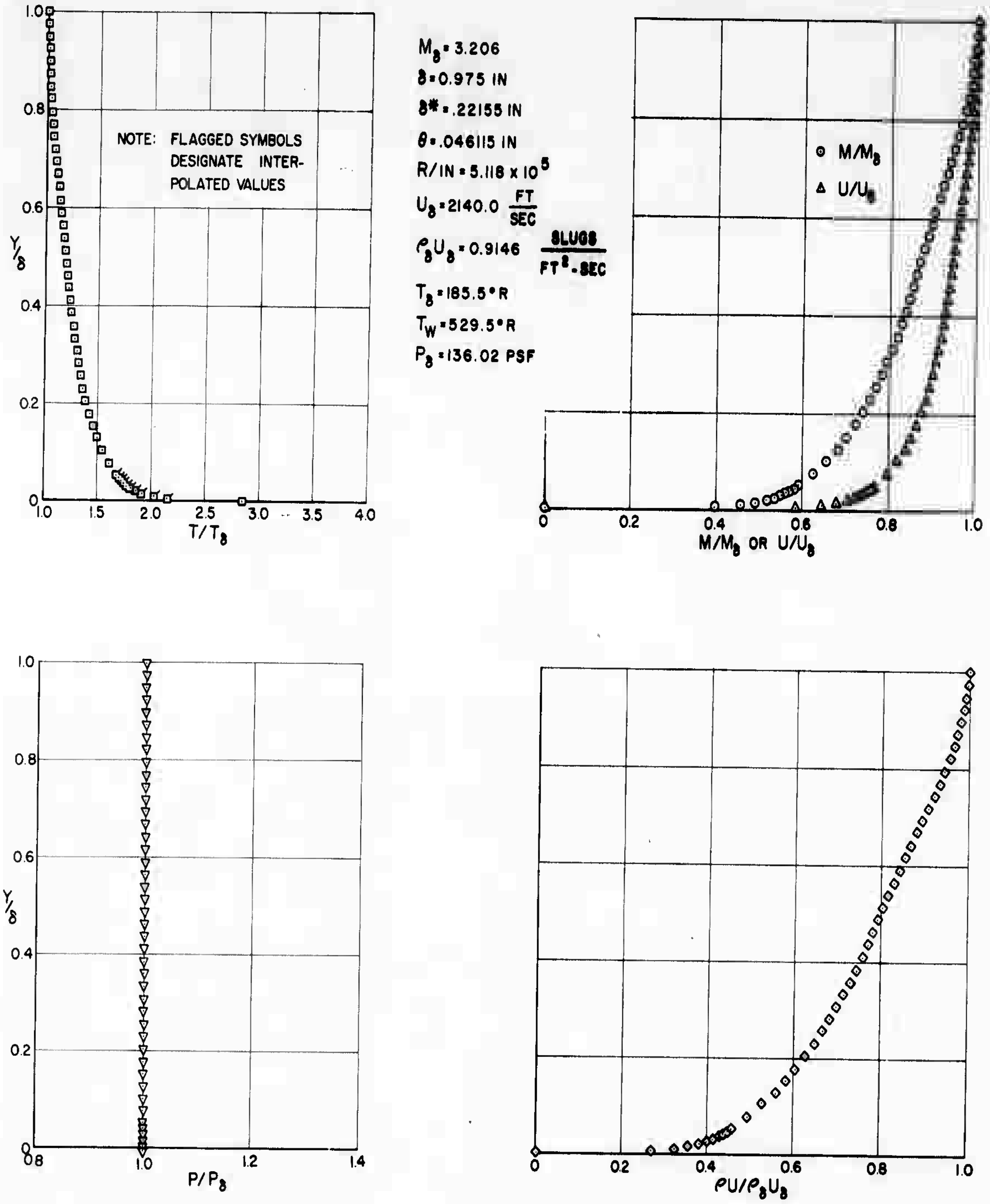
(h) $M_\infty = 3.30$, Station 12, $T_W/T_\delta = 2.932$.

Figure 19.- Continued



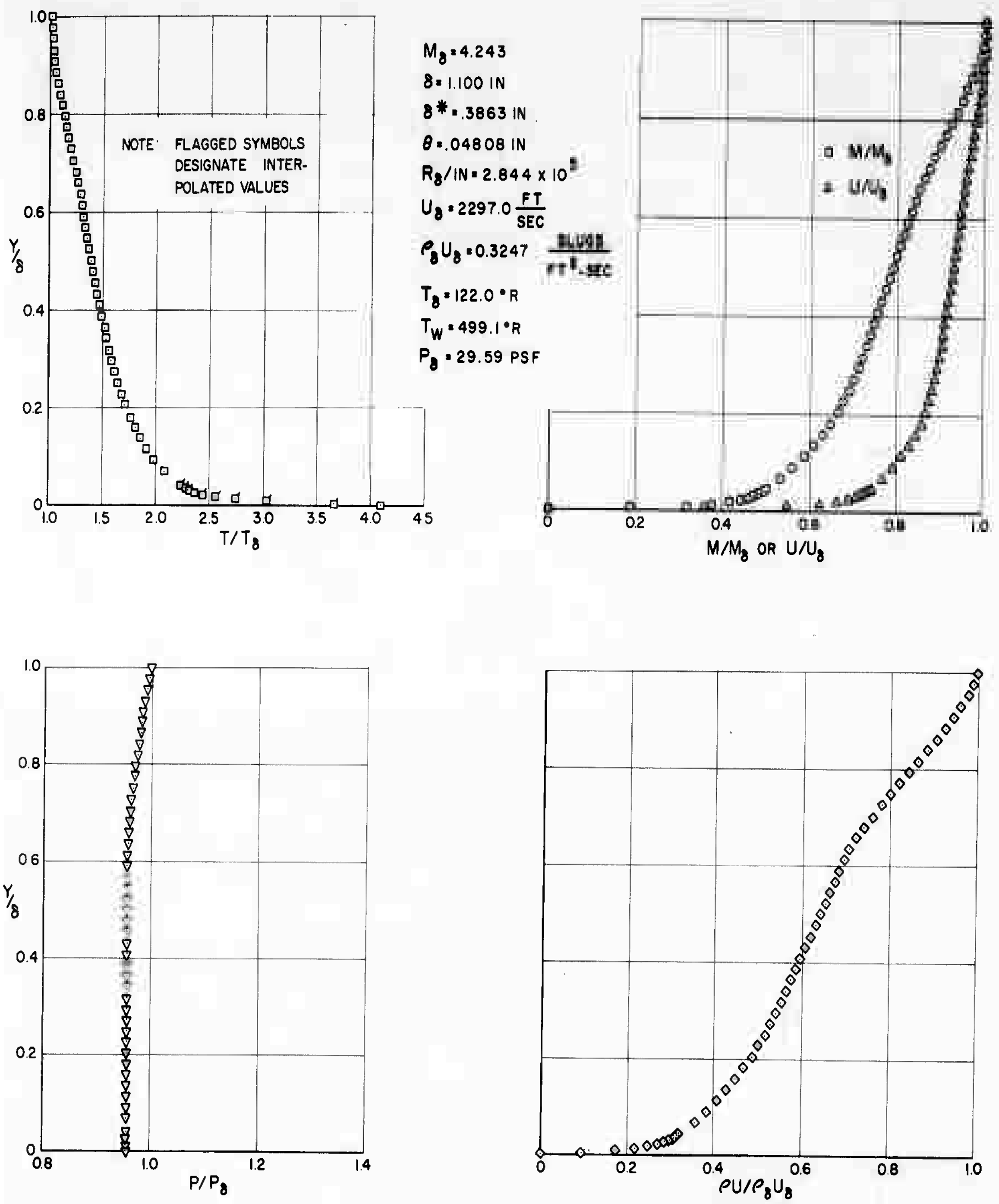
(i) $M_\infty = 3.30$, Station 14, $T_W/T_\delta = 2.911$.

Figure 19.- Continued.



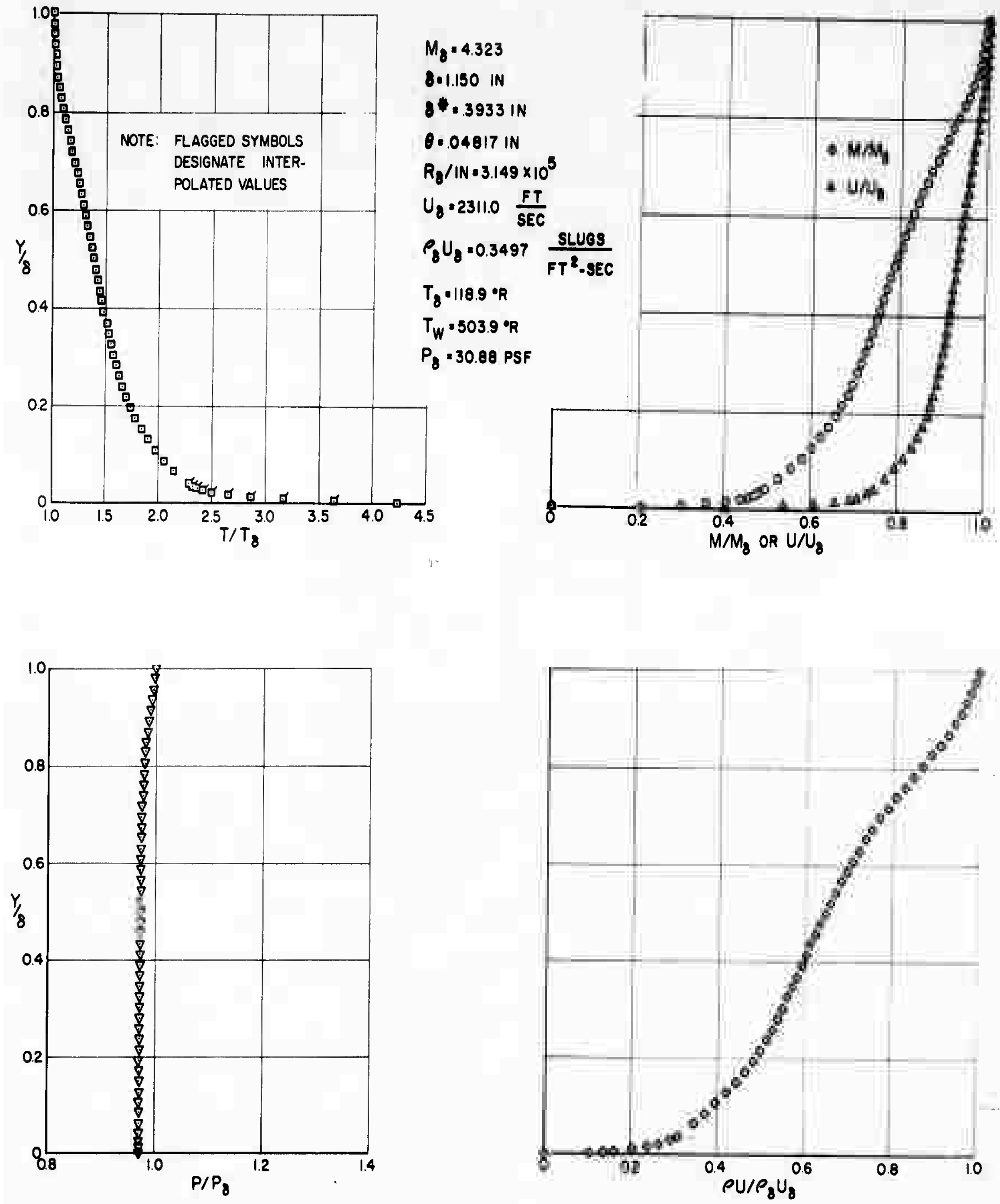
(j) $M_\infty = 3.30$, Station 16, $T_W/T_\delta = 2.854$.

Figure 19.- Continued.



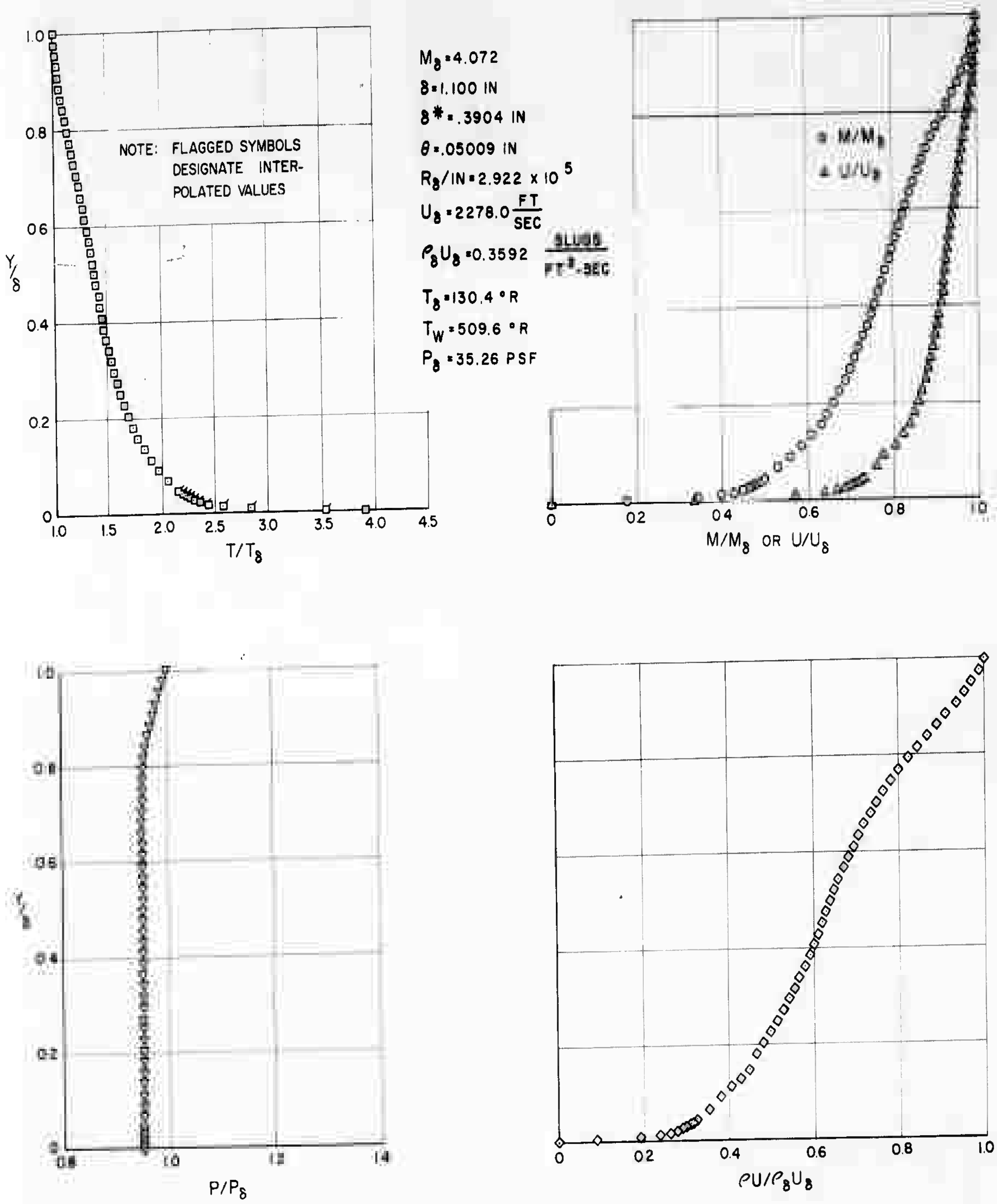
(k) $M_\infty = 4.50$, Station 10, $T_W/T_\delta = 4.090$.

Figure 19.- Continued.



(l) $M_\infty = 4.50$, Station 12, $T_W/T_\delta = 4.238$.

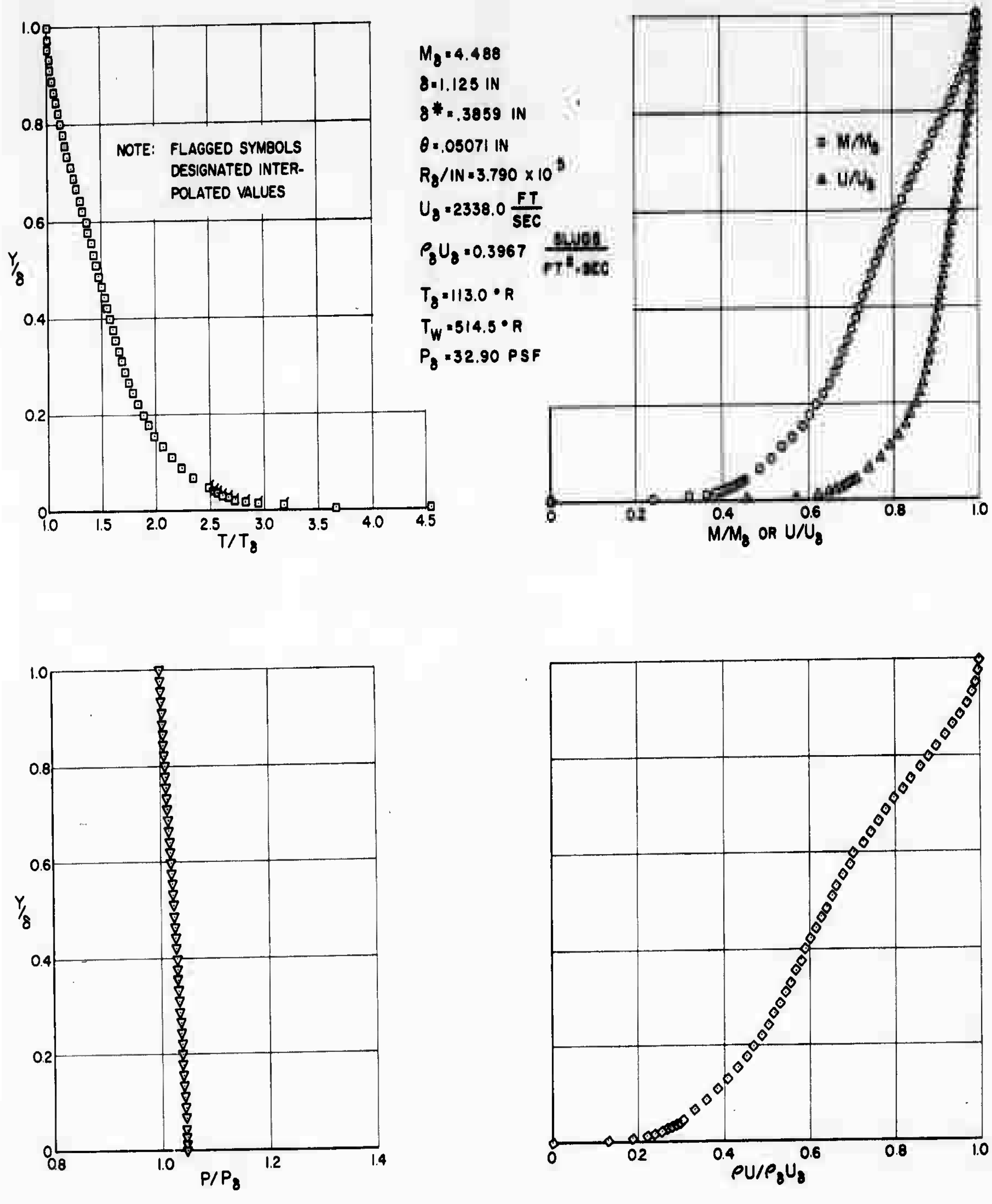
Figure 19.- Continued.



$M_\delta = 4.072$
$\delta = 1.100$ IN
$\delta^* = .3904$ IN
$\theta = .05009$ IN
$R_\delta/IN = 2.922 \times 10^5$
$U_\delta = 2278.0 \frac{FT}{SEC}$
$\rho_\delta U_\delta = 0.3592 \frac{SLUGS}{FT^2\text{-}SEC}$
$T_\delta = 130.4$ °R
$T_W = 509.6$ °R
$P_\delta = 35.26$ PSF

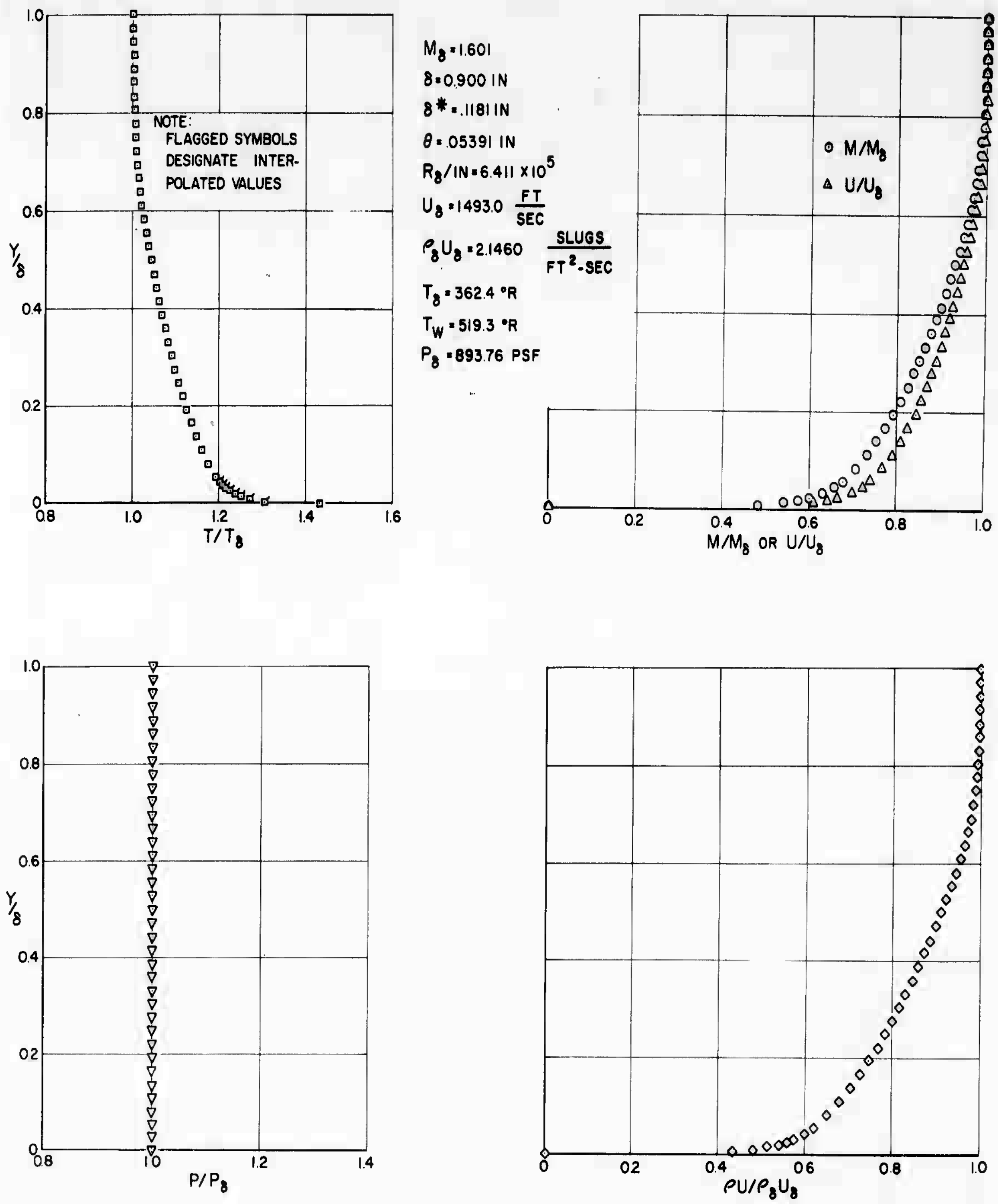
(m) $M_\infty = 4.50$, Station 14, $T_w/T_\delta = 3.908$.

Figure 19.- Continued.



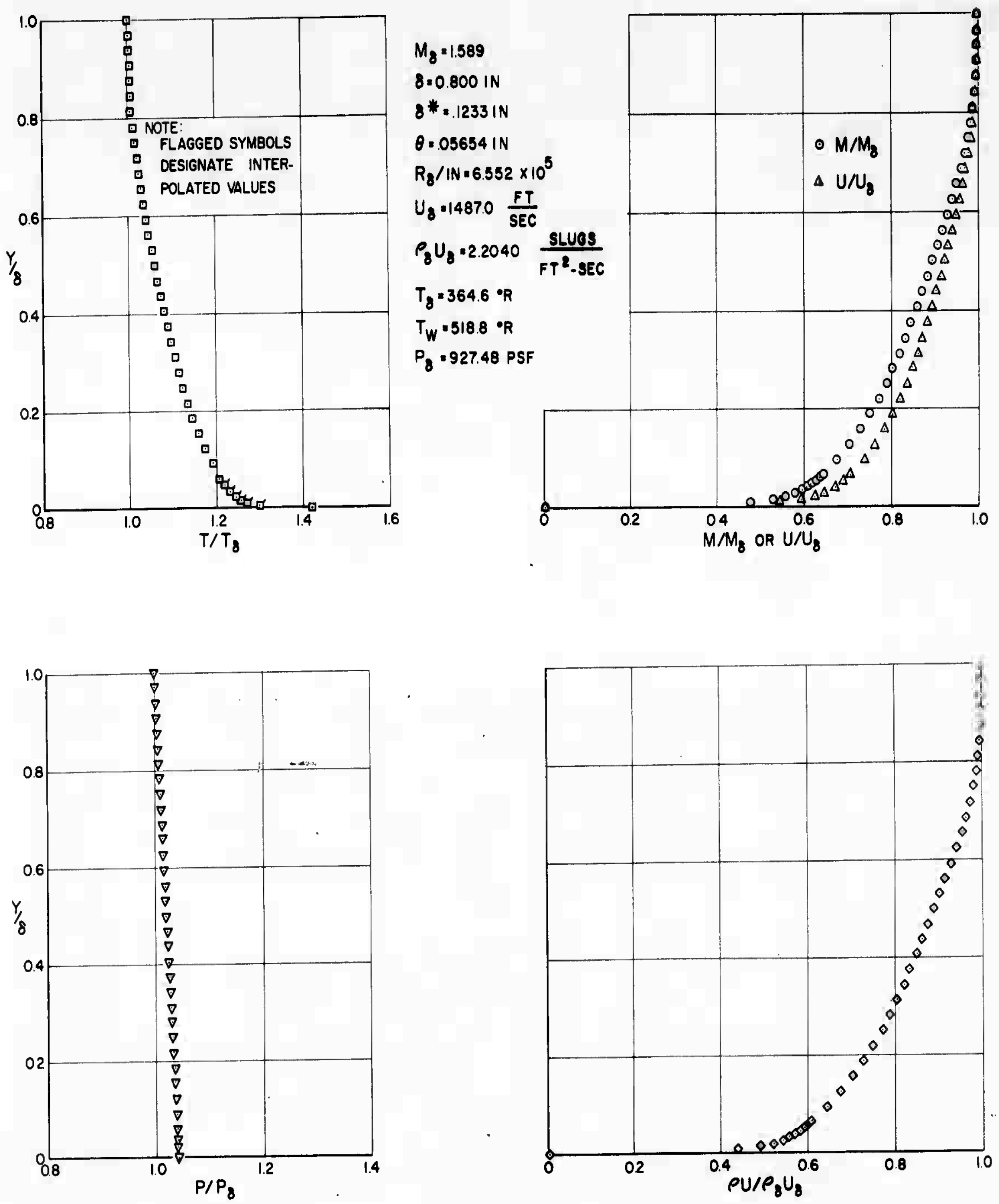
(n) $M_\infty = 4.50$, Station 16, $T_W/T_\delta = 4.553$.

Figure 19.- Concluded.



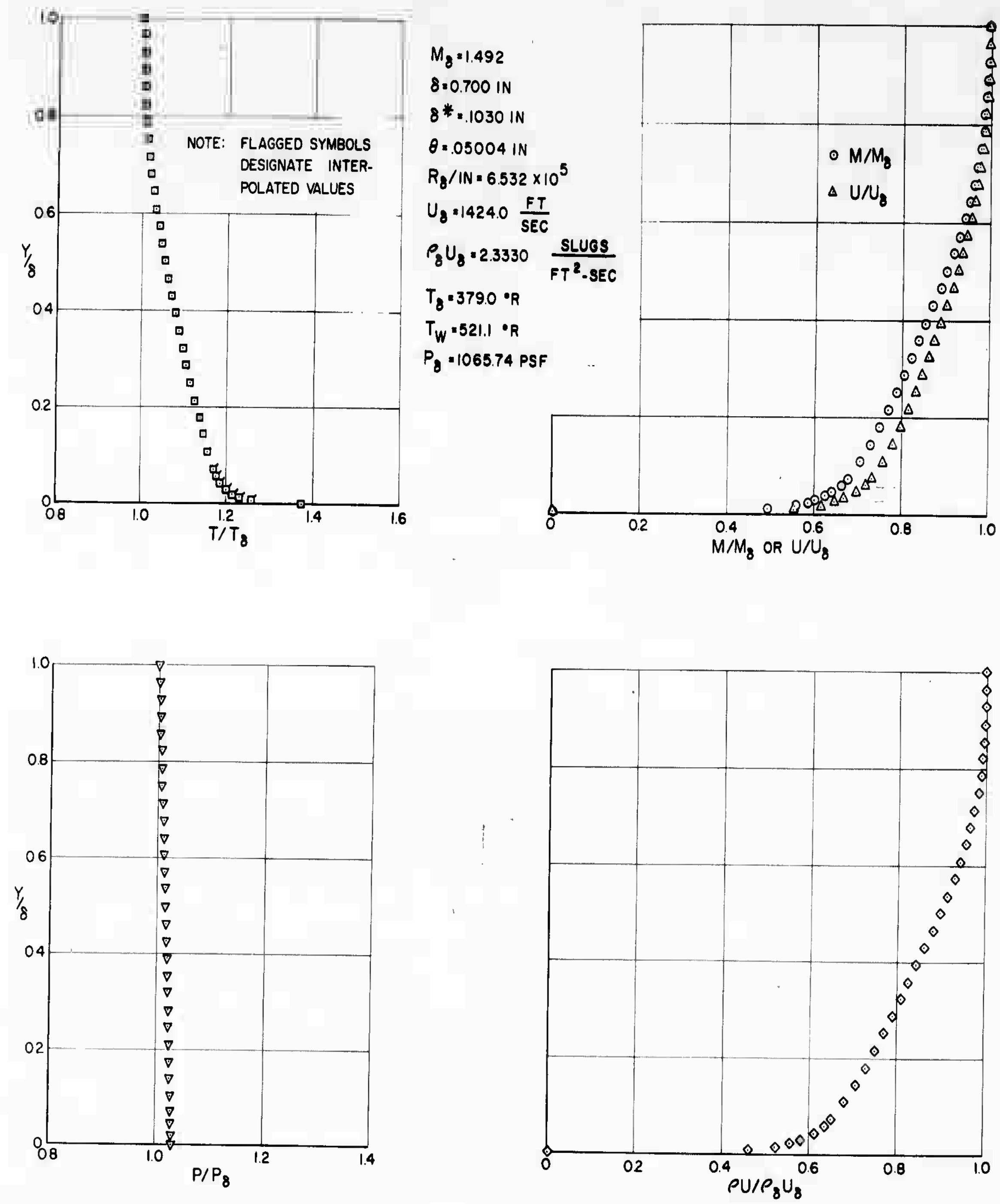
(a) $M_\infty = 1.61$, Station 0, $T_W/T_\delta = 1.432$.

Figure 20.- Profiles of temperature, velocity, Mach number, static pressure, and mass flow for the concave-center section.



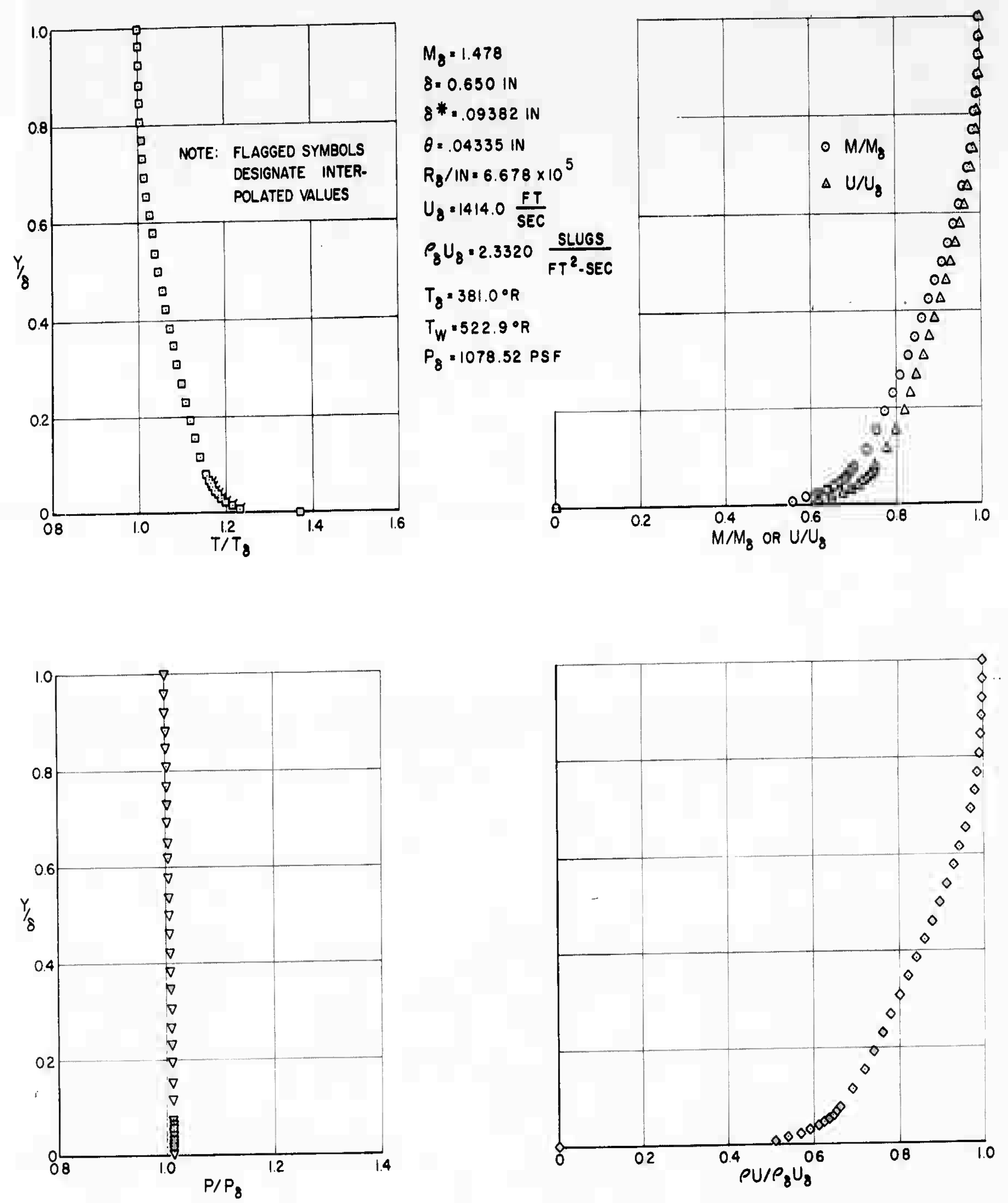
(b) $M_\infty = 1.61$, Station 2, $T_W/T_\delta = 1.422$.

Figure 20.- Continued.



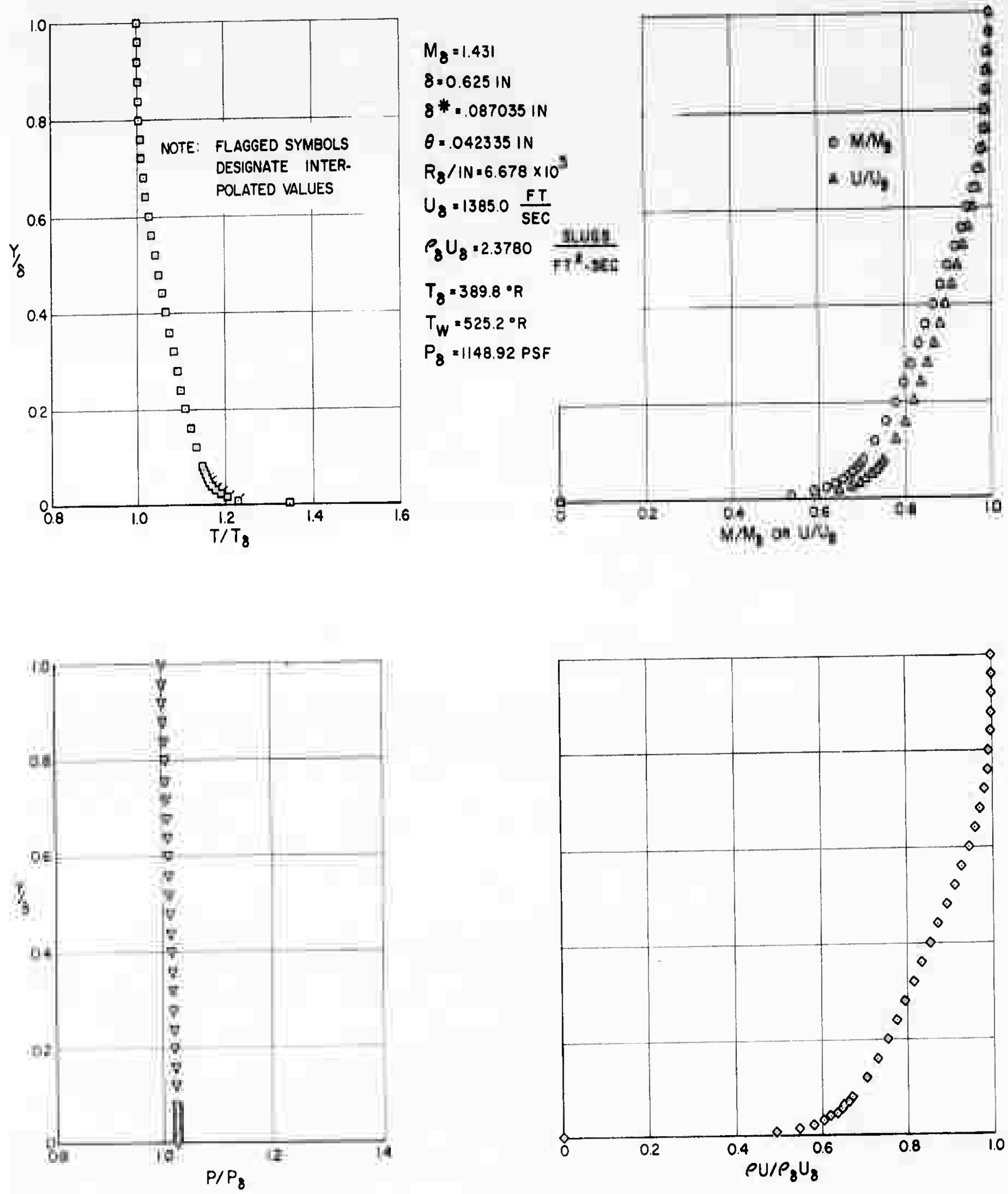
(c) $M_\infty = 1.61$, Station 6, $T_W/T_\delta = 1.374$.

Figure 20.- Continued.



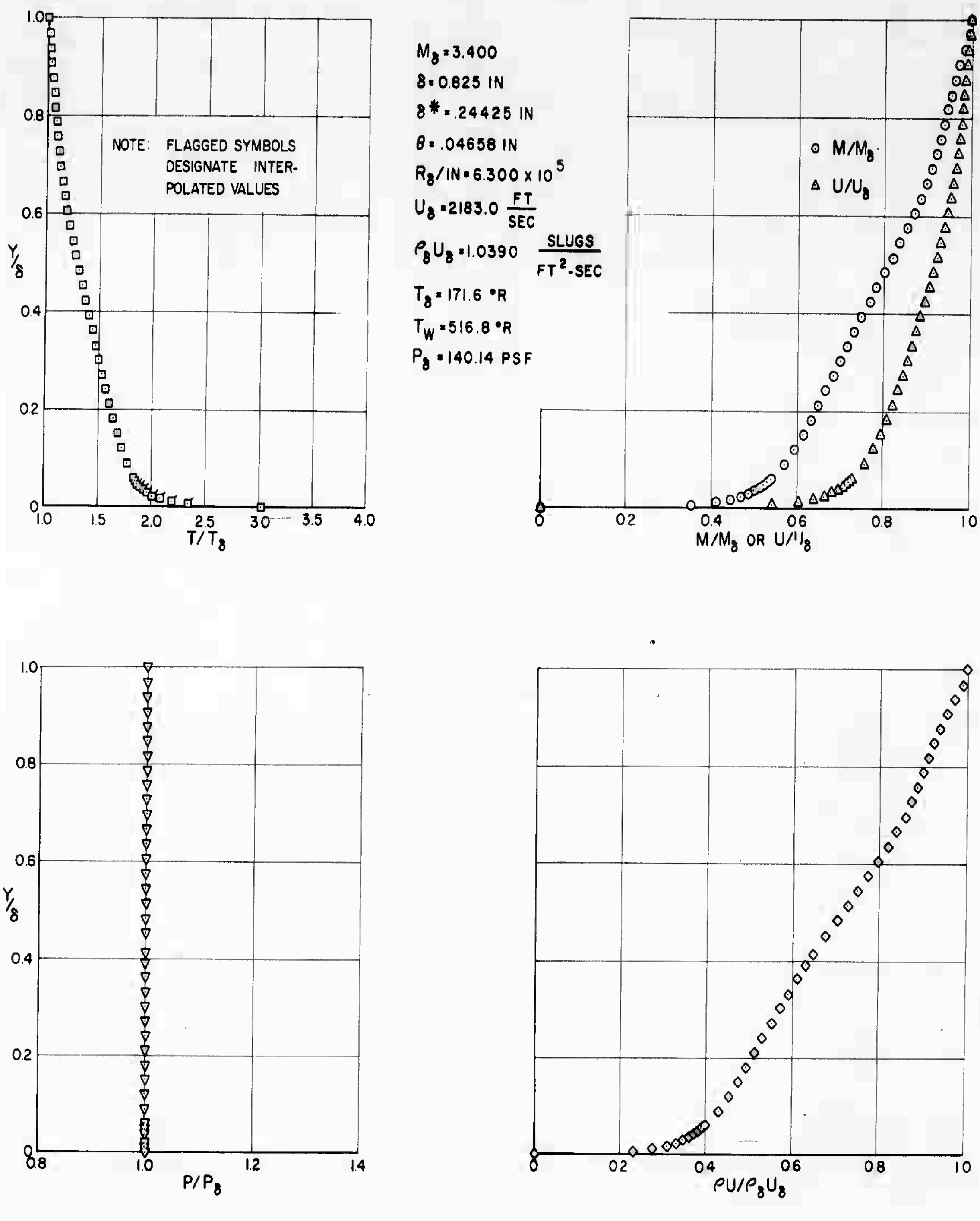
(d) $M_\infty = 1.61$, Station 8, $T_W/T_\delta = 1.372$.

Figure 20.- Continued.



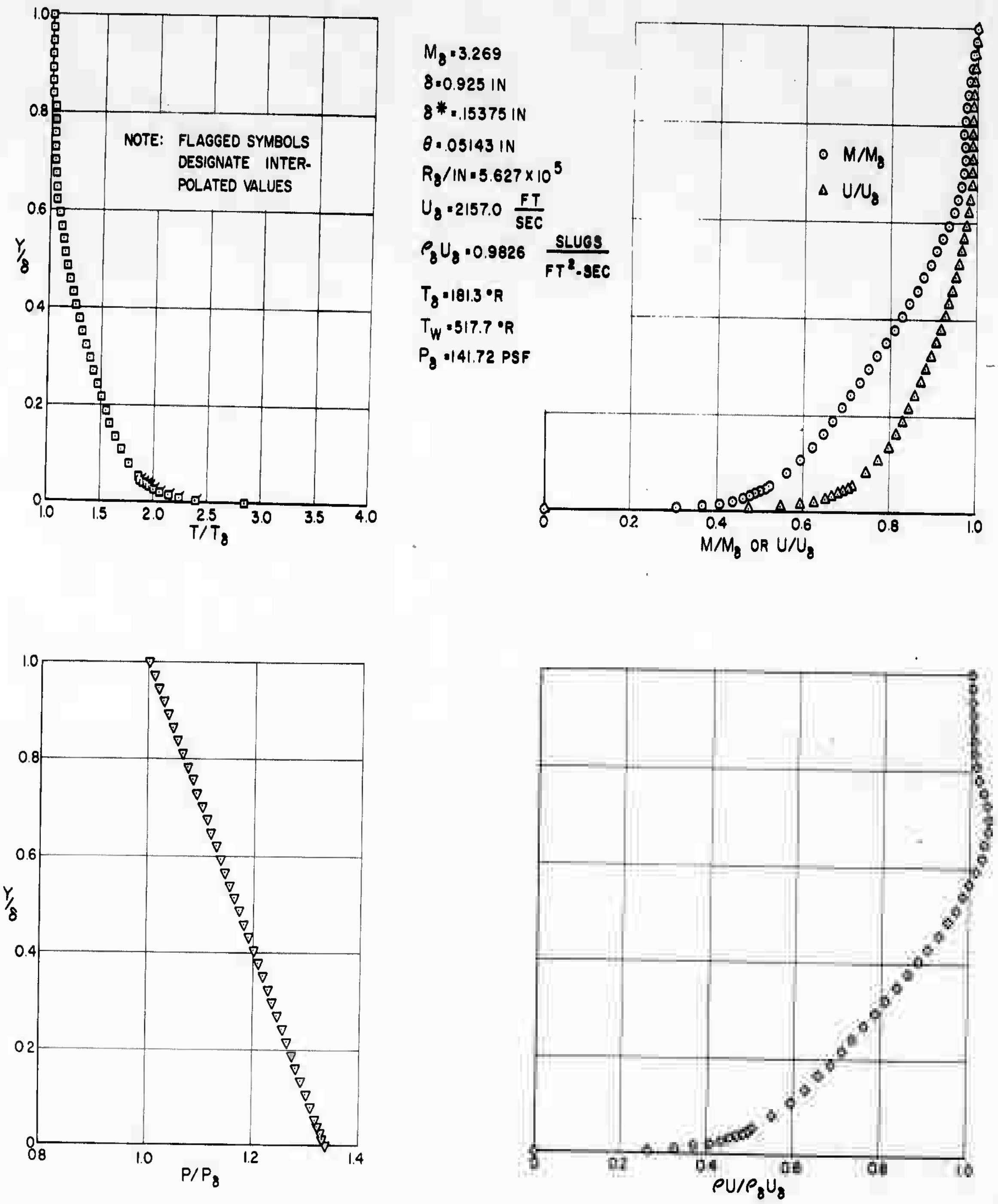
(e) $M_\infty = 1.61$, Station 10, $T_W/T_\delta = 1.347$.

Figure 20.- Continued.



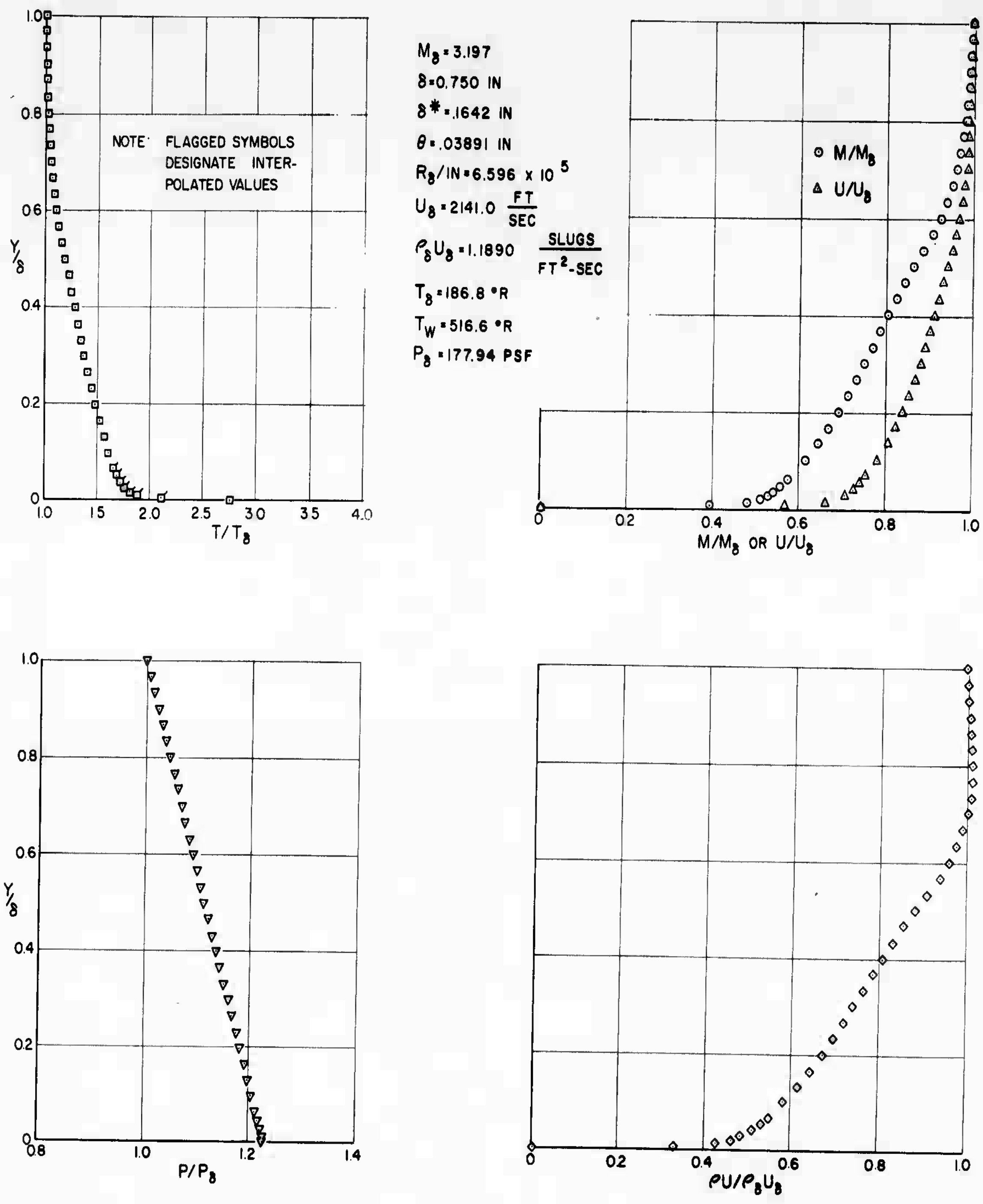
(f) $M_\infty = 3.30$, Station 0, $T_W/T_\delta = 3.011$.

Figure 20.- Continued.



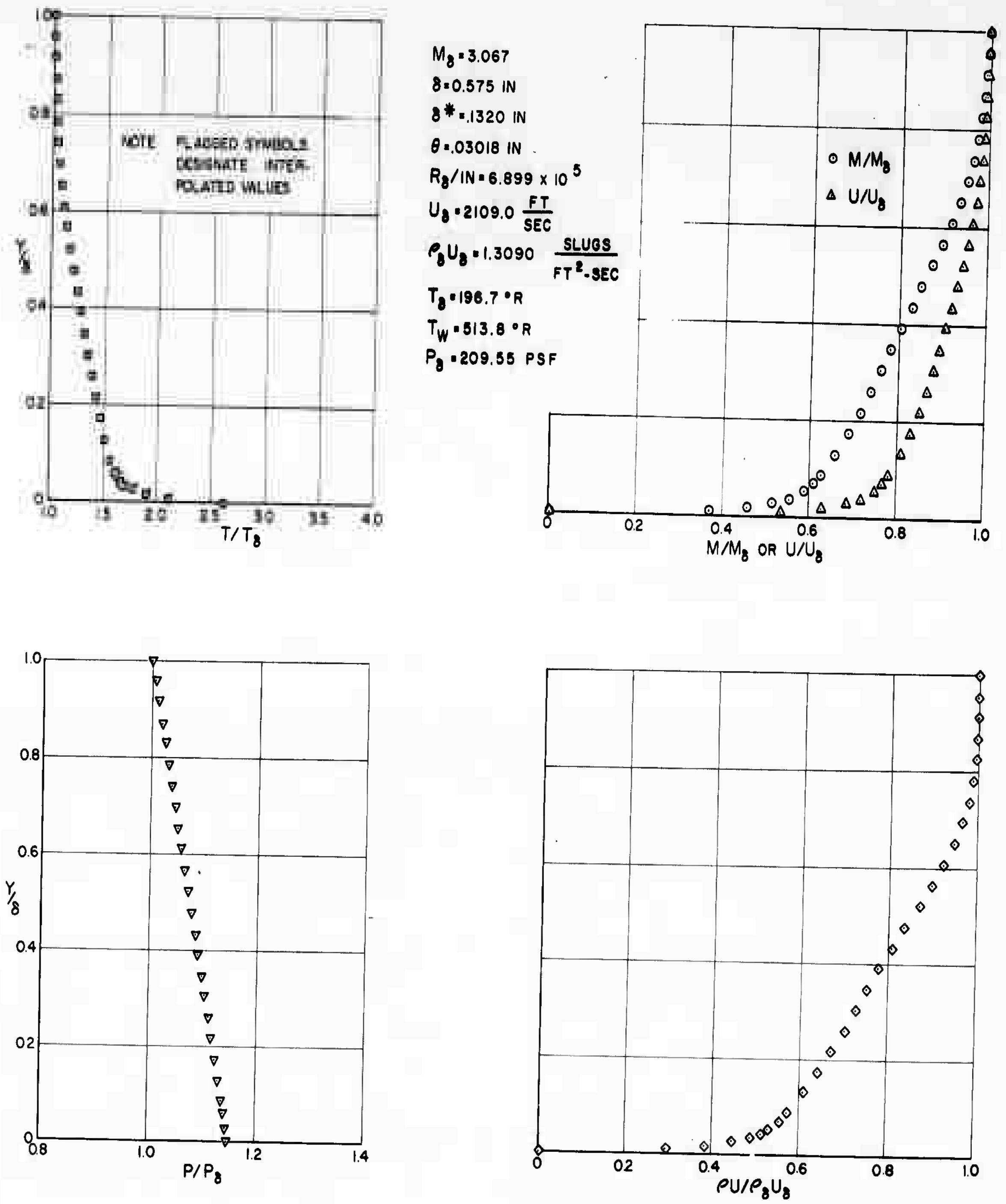
(g) $M_\infty = 3.30$, Station 2, $T_W/T_\delta = 2.855$.

Figure 20.- Continued.



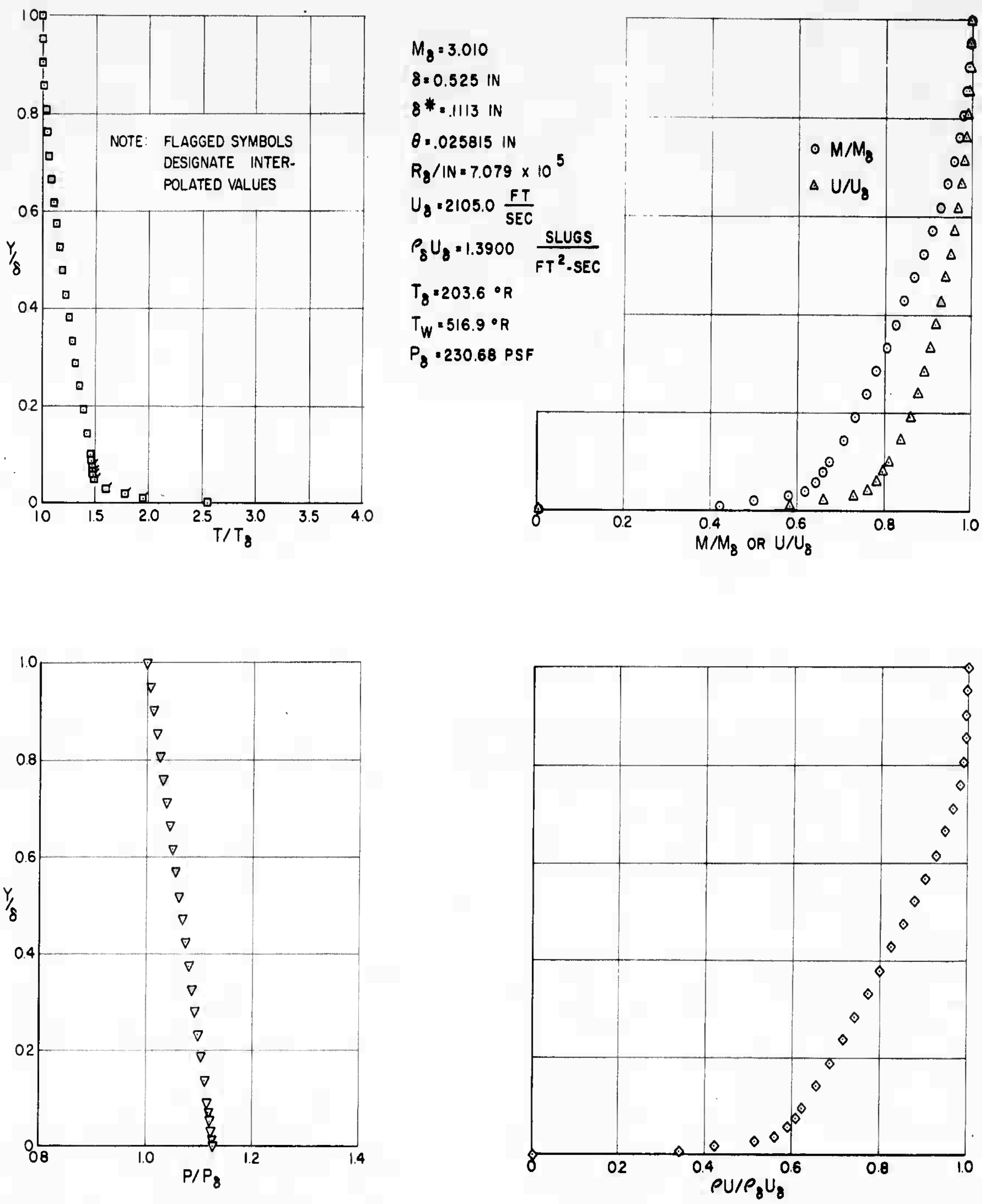
(h) $M_\infty = 3.30$, Station 6, $T_W/T_\delta = 2.765$.

Figure 20.-Continued.



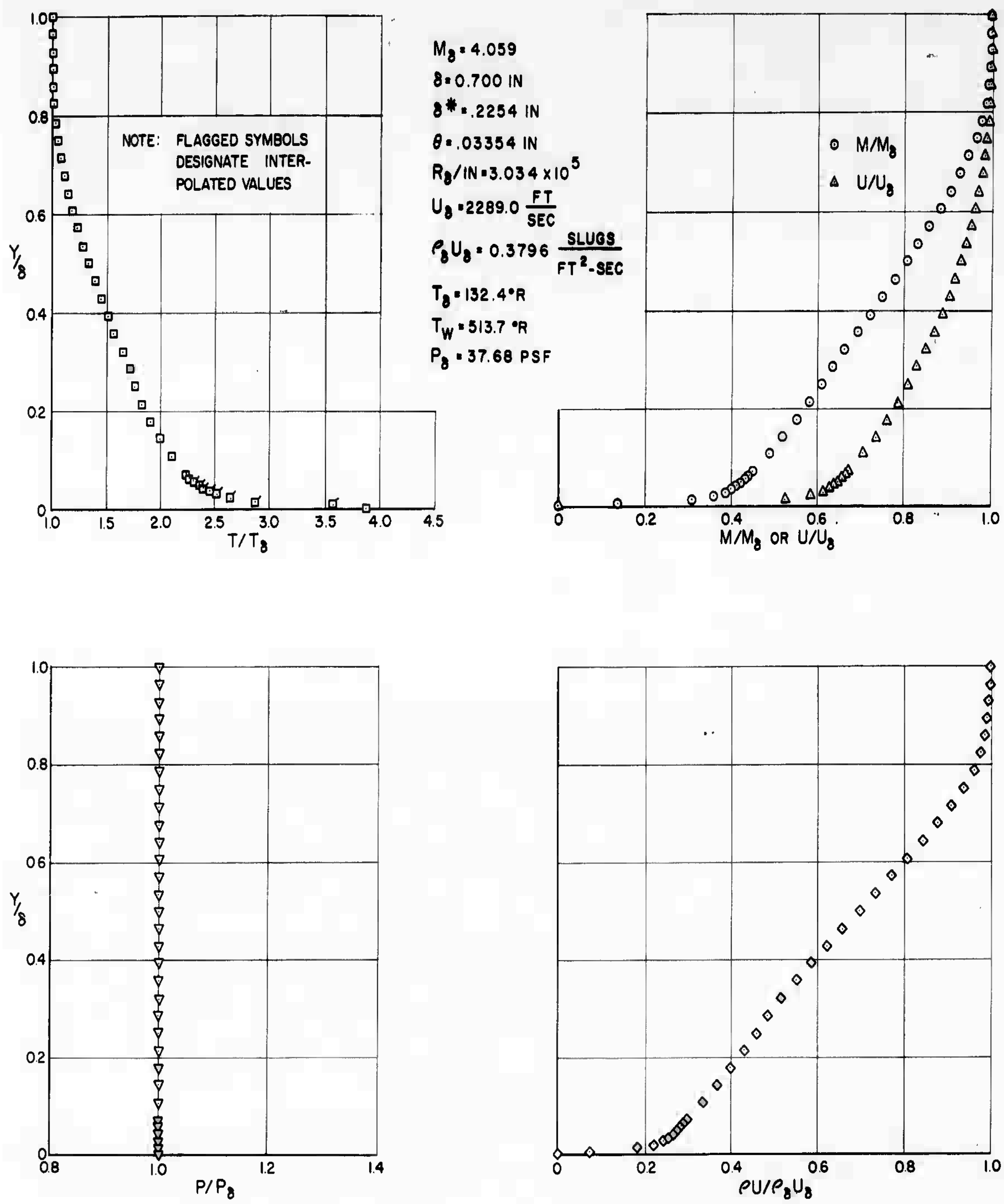
(i) $M_\infty = 3.30$, Station 8, $T_W/T_\delta = 2.612$.

Figure 20.- Continued.



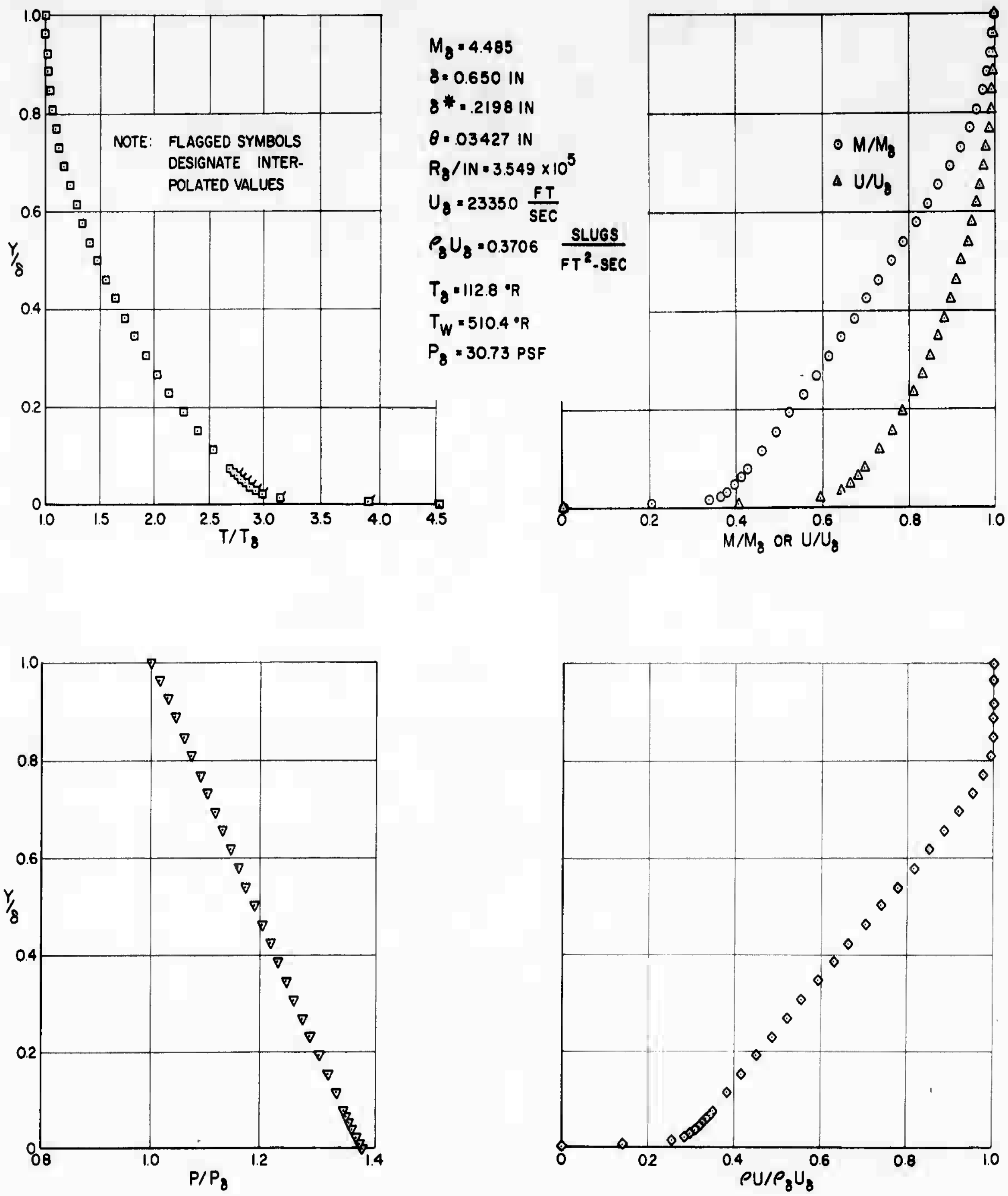
(j) $M_\infty = 3.30$, Station 10, $T_W/T_\delta = 2.538$.

Figure 20.- Continued.



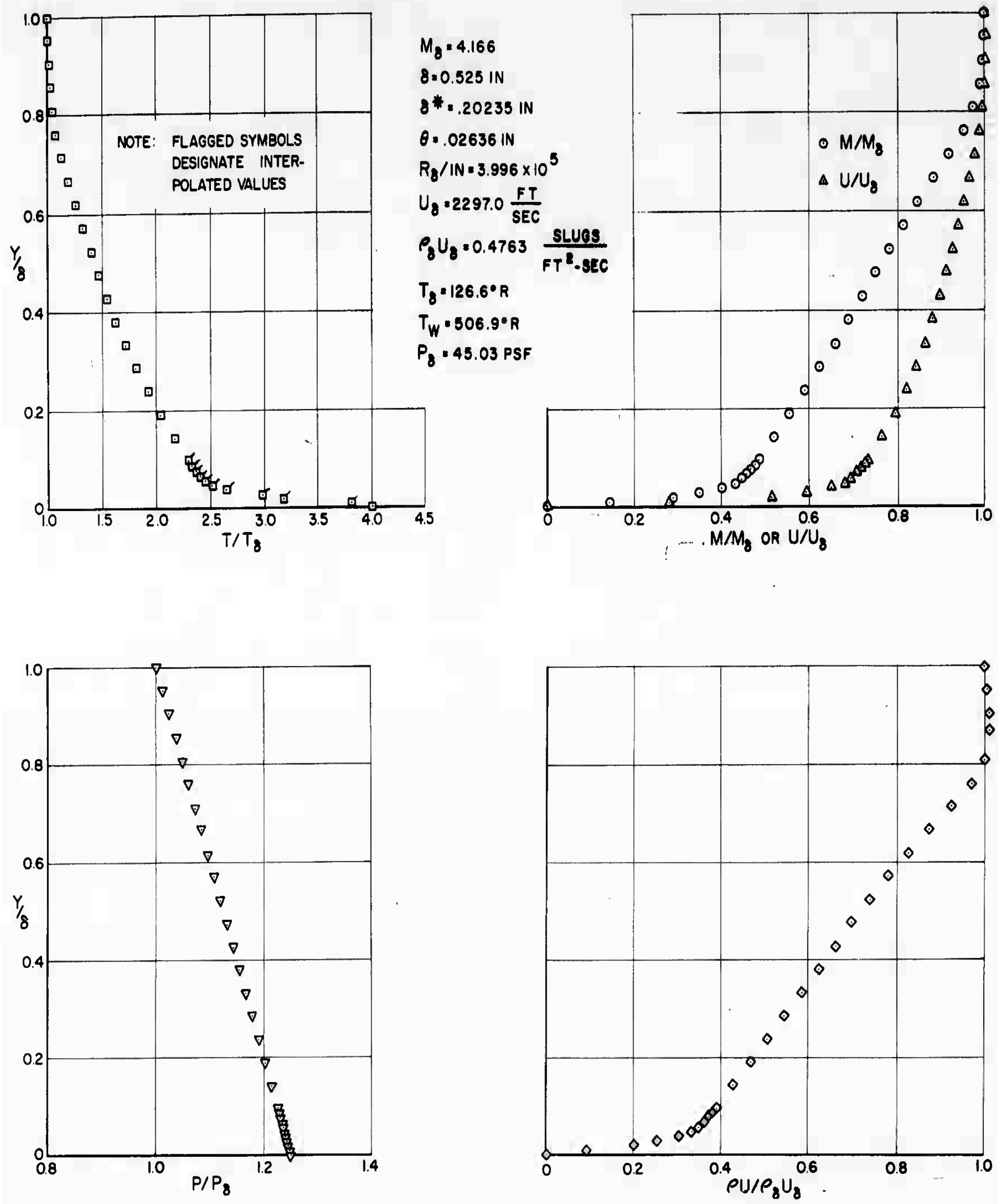
(k) $M_\infty = 4.50$, Station 0, $T_W/T_\delta = 3.879$.

Figure 20.- Continued.



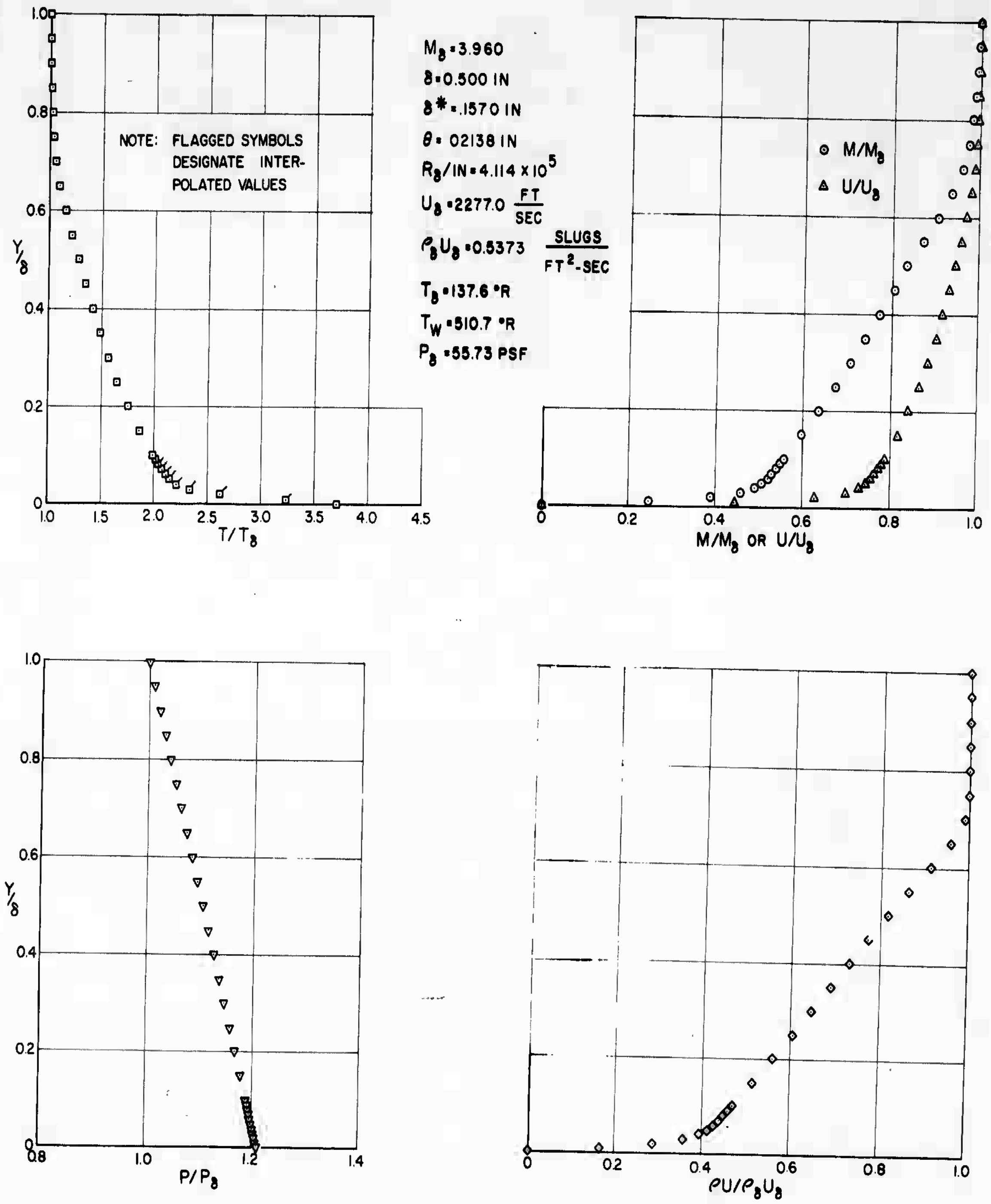
(l) M_∞ = 4.50, Station 2, T_W/T_δ = 4.524.

Figure 20.- Continued.



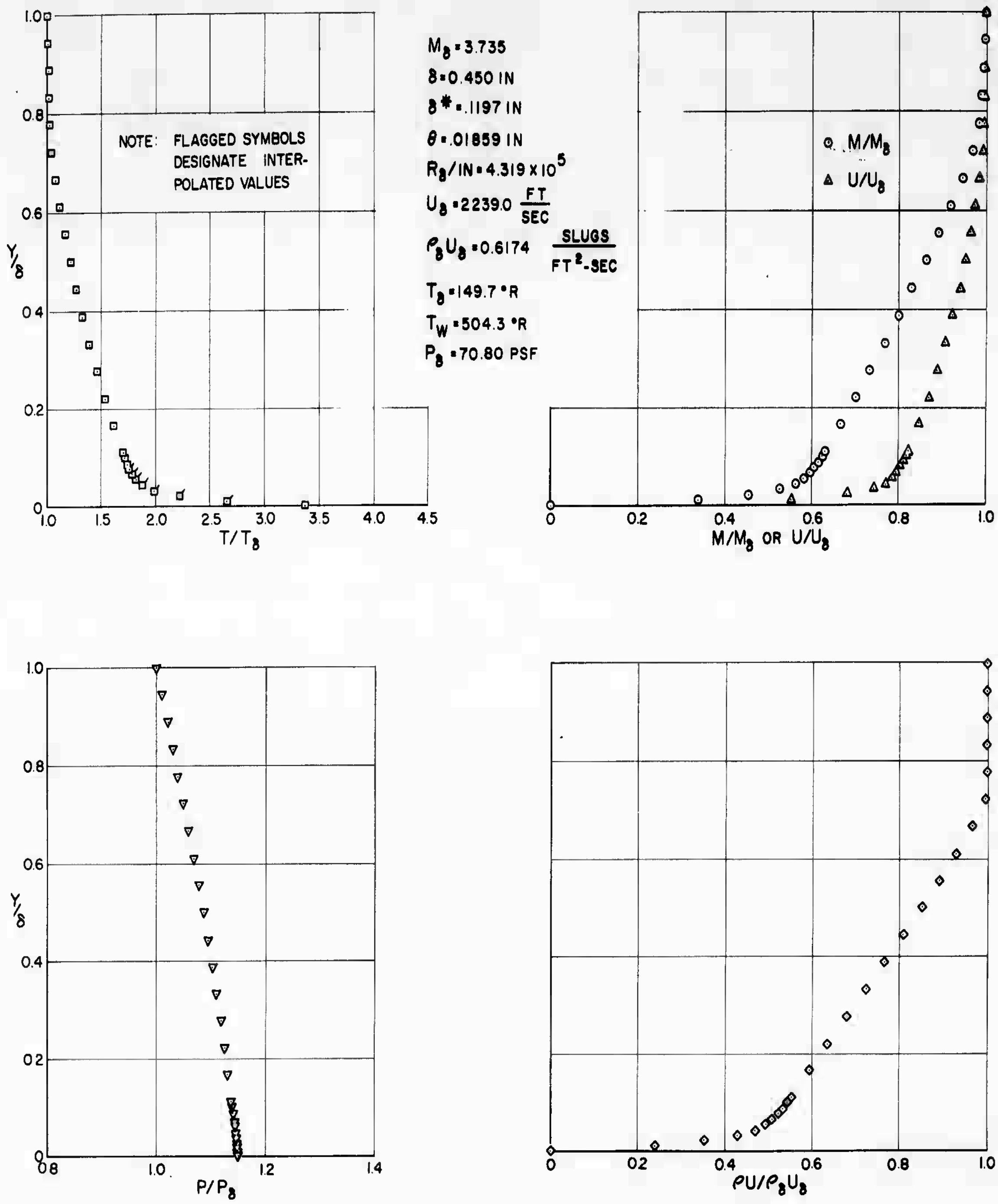
(m) $M_\infty = 4.50$, Station 6, $T_W/T_\delta = 4.003$.

Figure 20.- Continued.



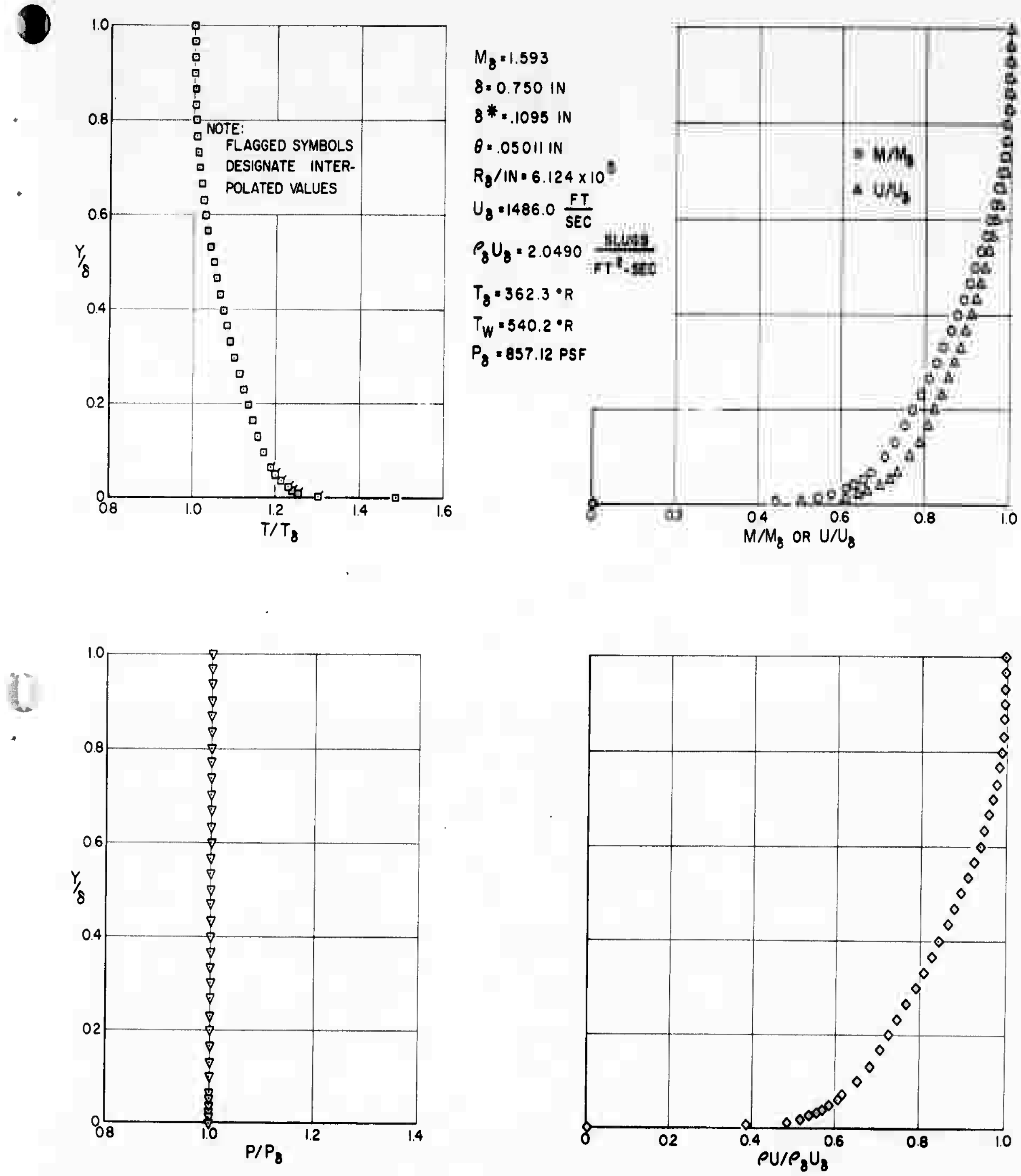
(n) $M_\infty = 4.50$, Station 8, $T_W/T_\delta = 3.711$.

Figure 20.- Continued.



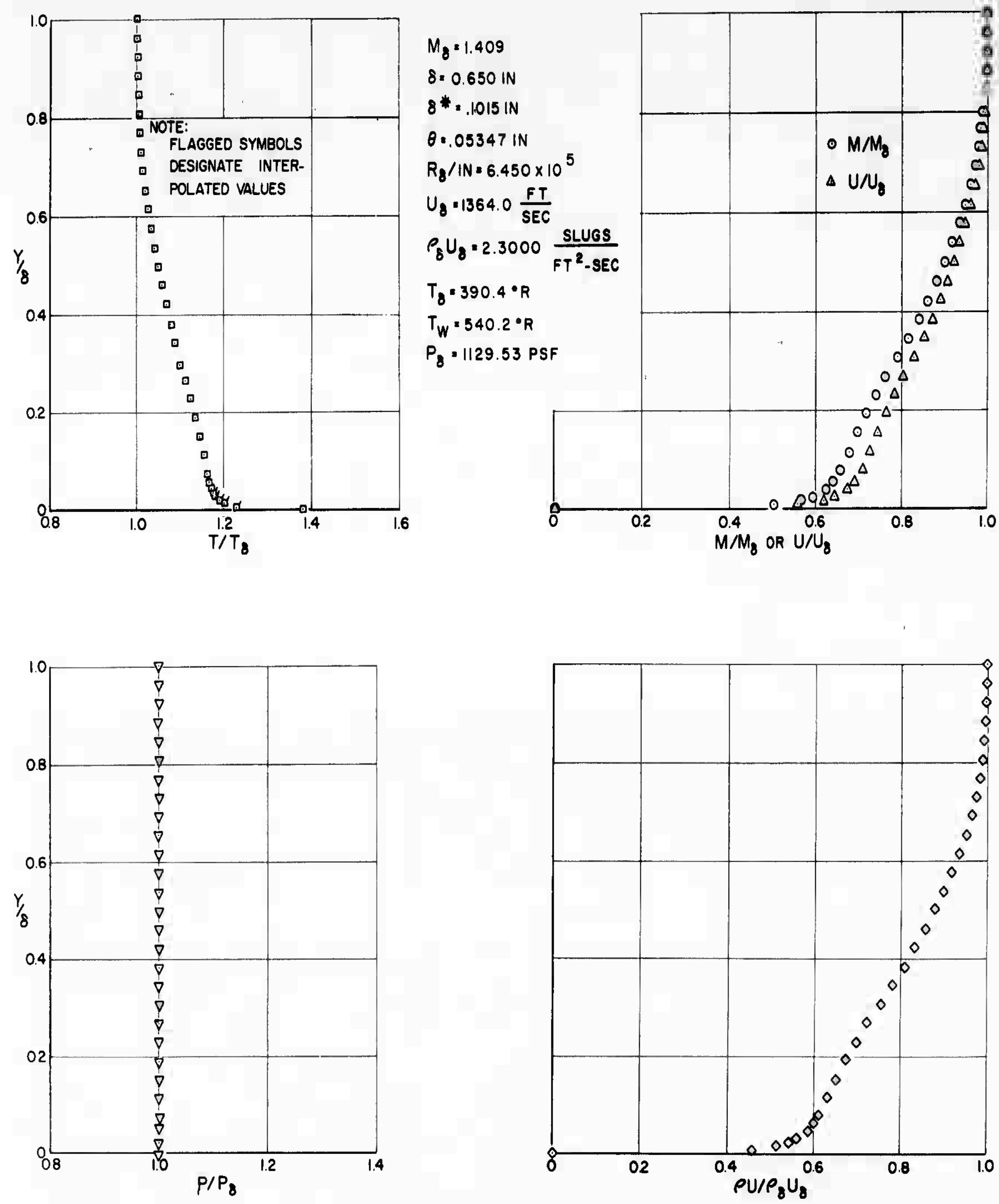
(o) $M_\infty = 4.50$, Station 10, $T_W/T_\delta = 3.368$.

Figure 20.- Concluded.



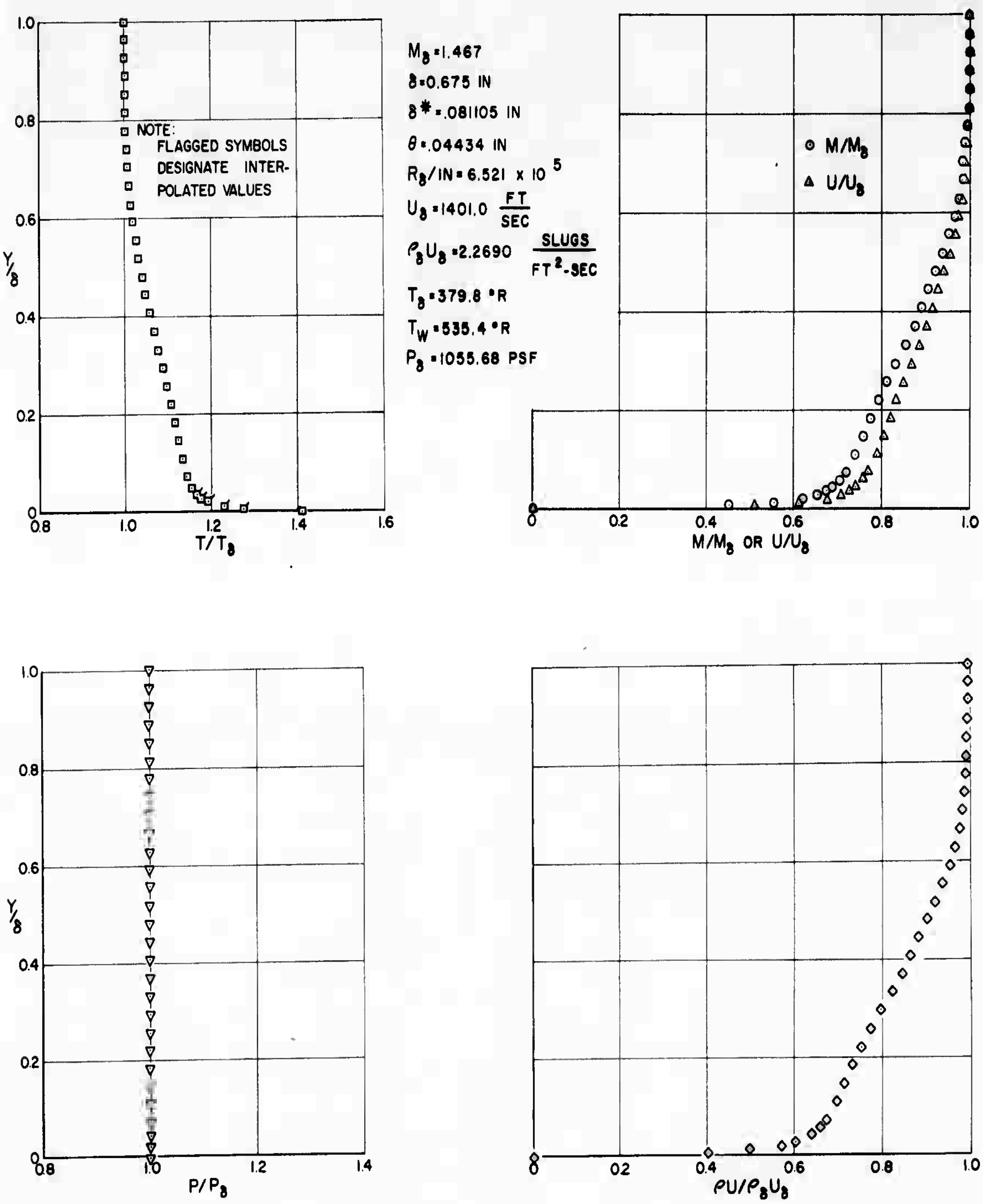
(a) $M_\infty = 1.61$, Station -2, $T_W/T_\delta = 1.491$.

Figure 21.- Profiles of temperature, velocity, Mach number, static pressure, and mass flow for the convex center section with a nearly adiabatic wall.



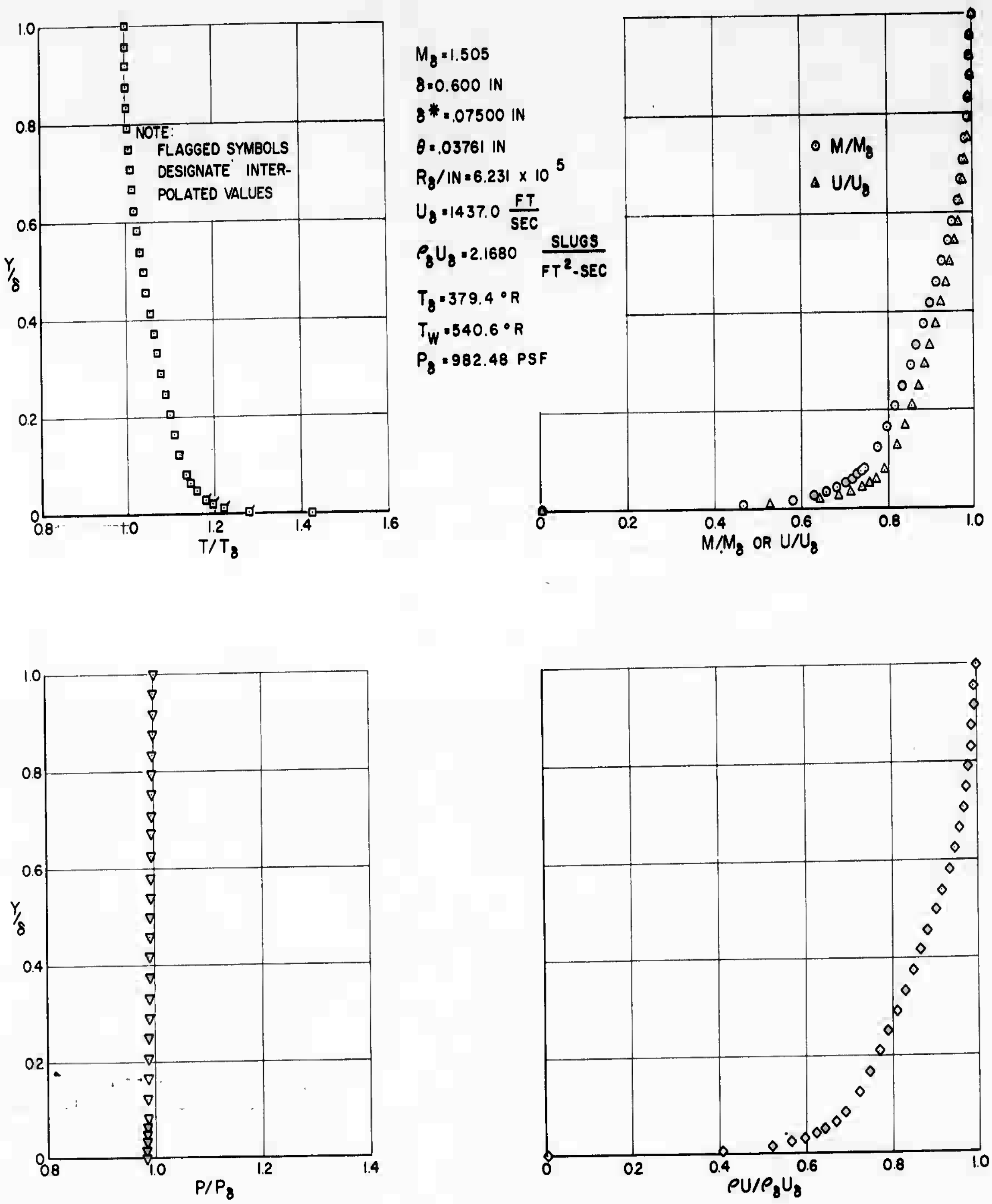
(b) $M_\infty = 1.61$, Station 2, $T_W/T_\delta = 1.383$.

Figure 21.- Continued.



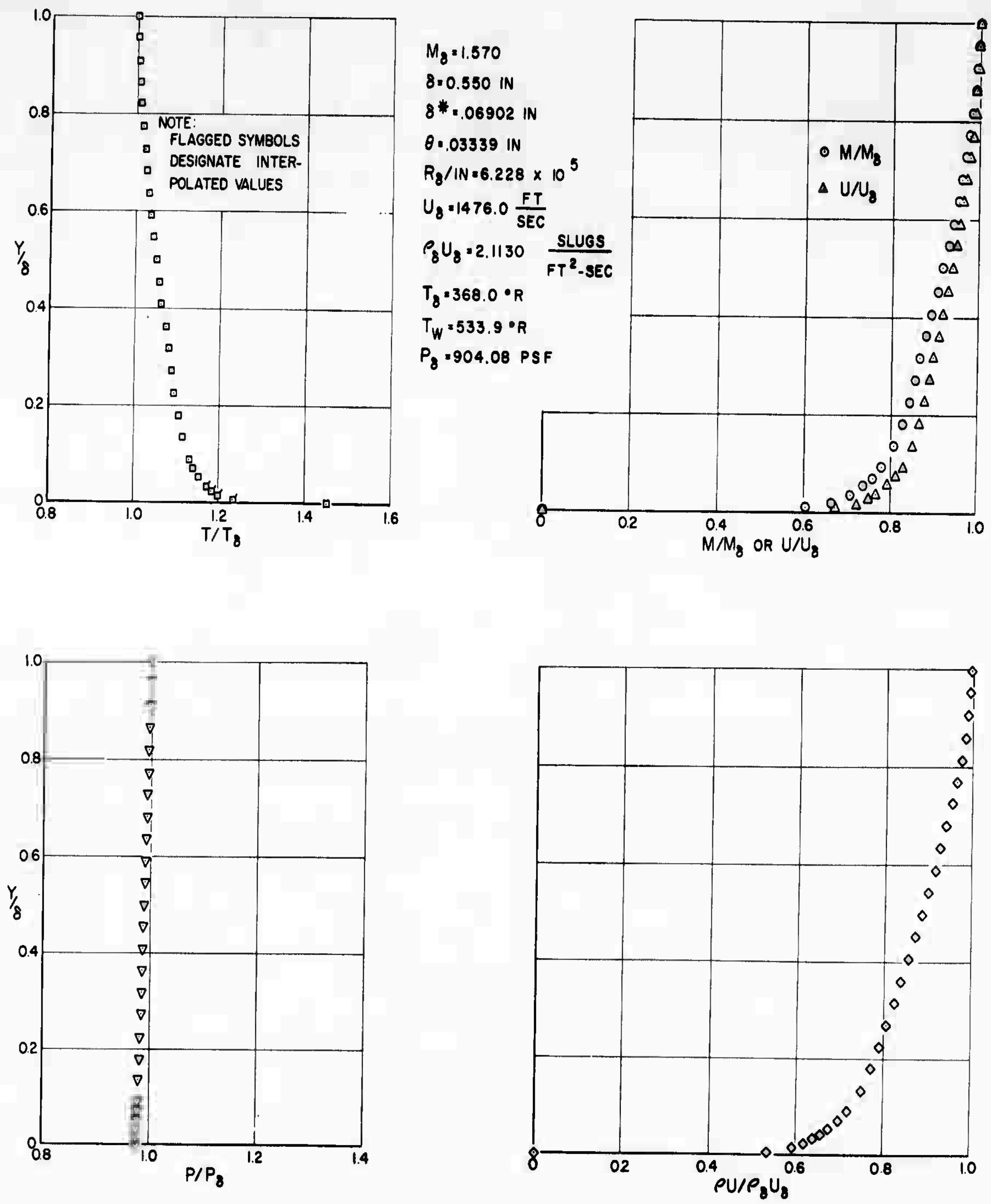
(c) $M_\infty = 1.61$, Station 4, $T_W/T_\delta = 1.409$.

Figure 21.- Continued.



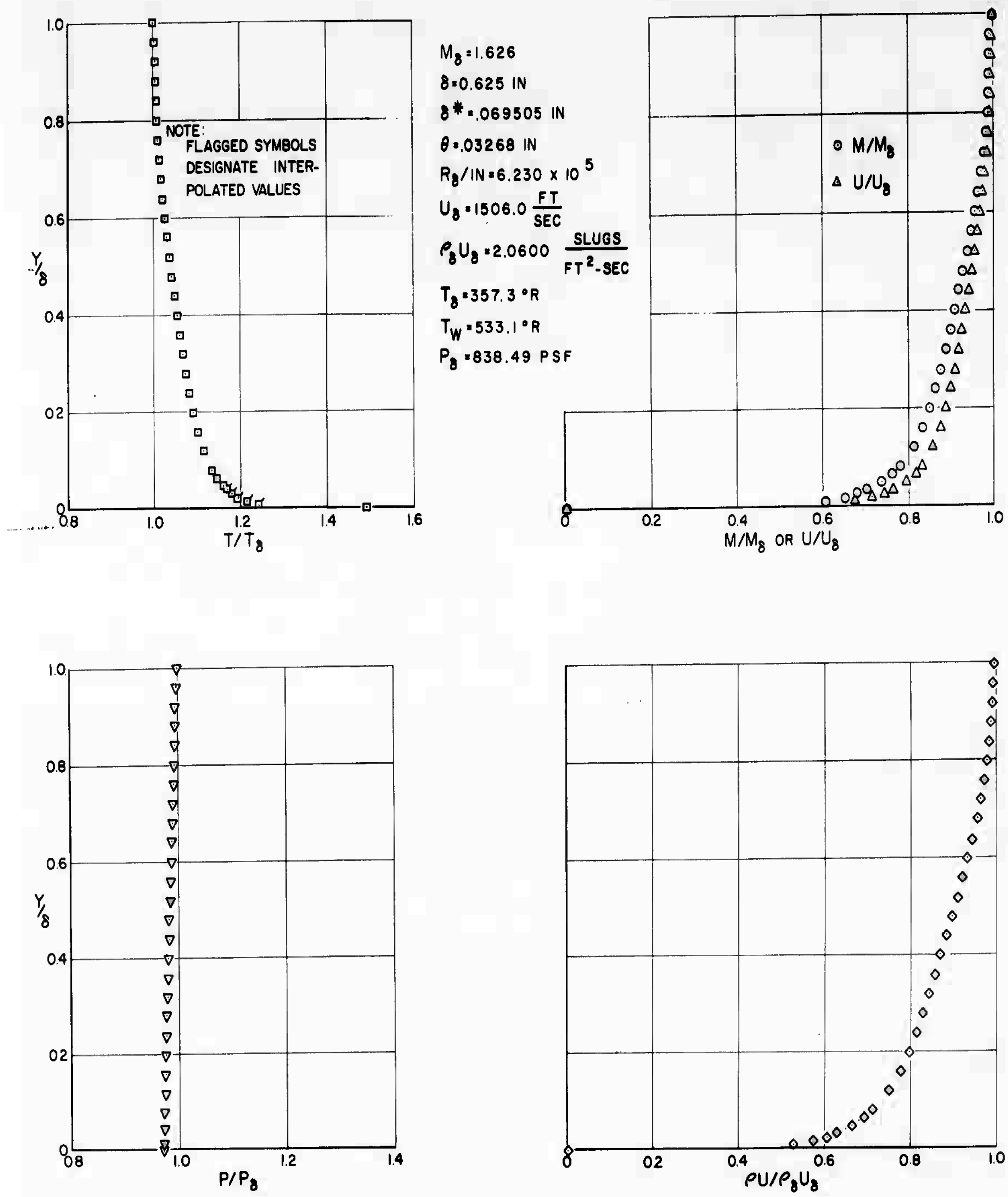
(d) $M_\infty = 1.61$, Station 6, $T_W/T_\delta = 1.424$.

Figure 21.- Continued.



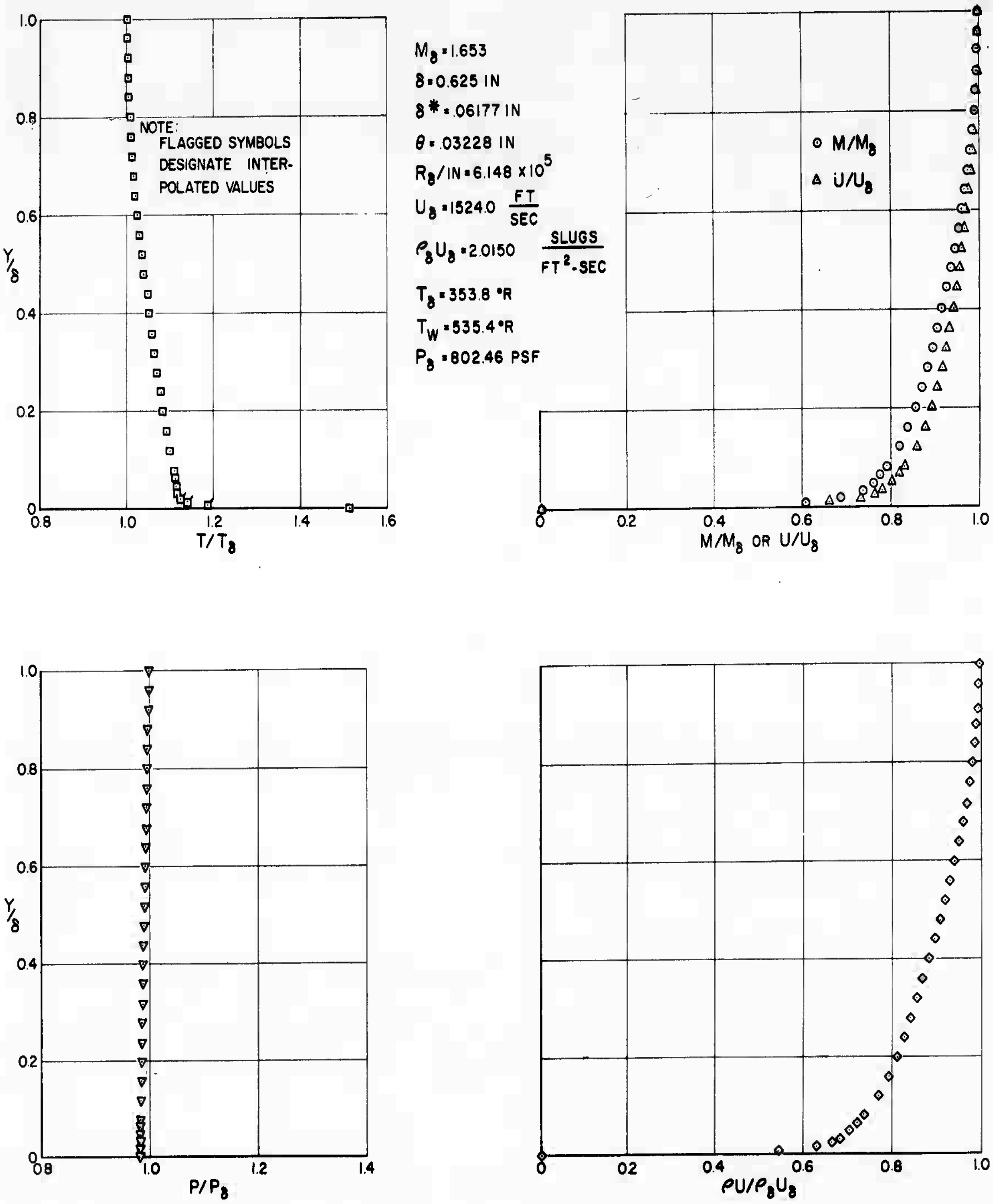
(e) $M_\infty = 1.61$, Station 8, $T_w/T_\delta = 1.450$.

Figure 21.- Continued.



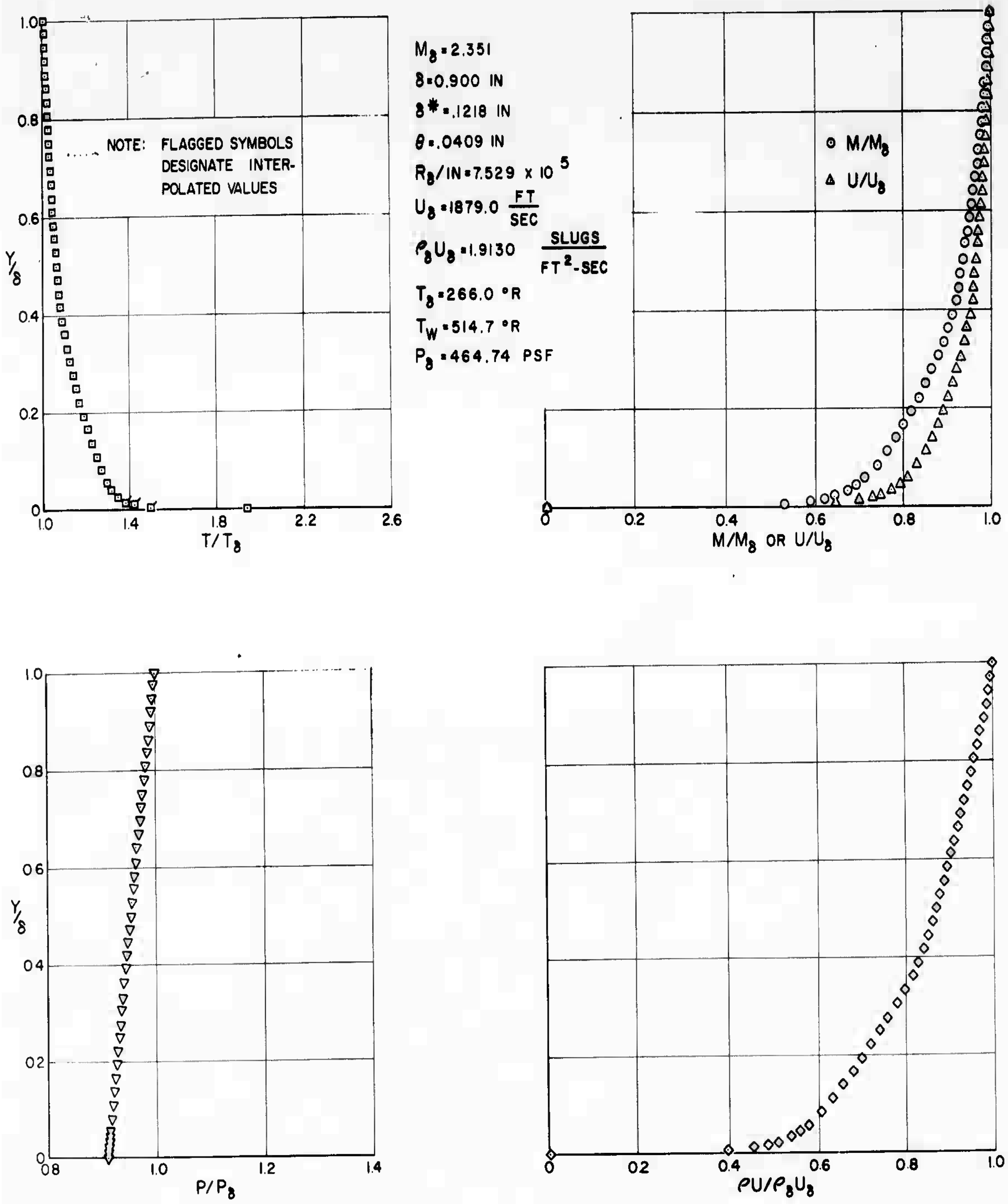
(f) $M_\infty = 1.61$, Station 10, $T_W/T_\delta = 1.492$.

Figure 21.- Continued.



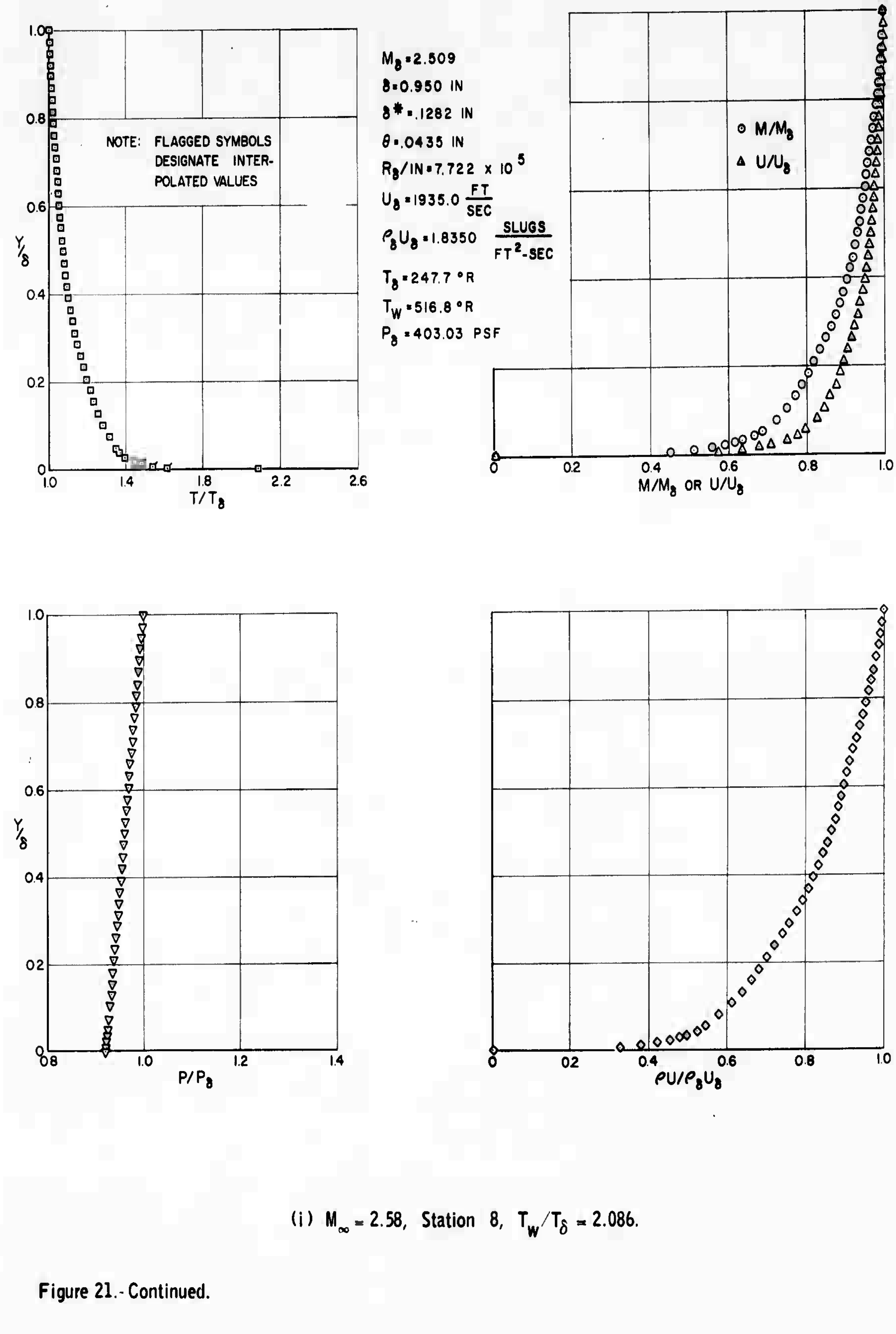
(g) $M_\infty = 1.61$, Station 12, $T_W/T_\delta = 1.513$.

Figure 21.- Continued.



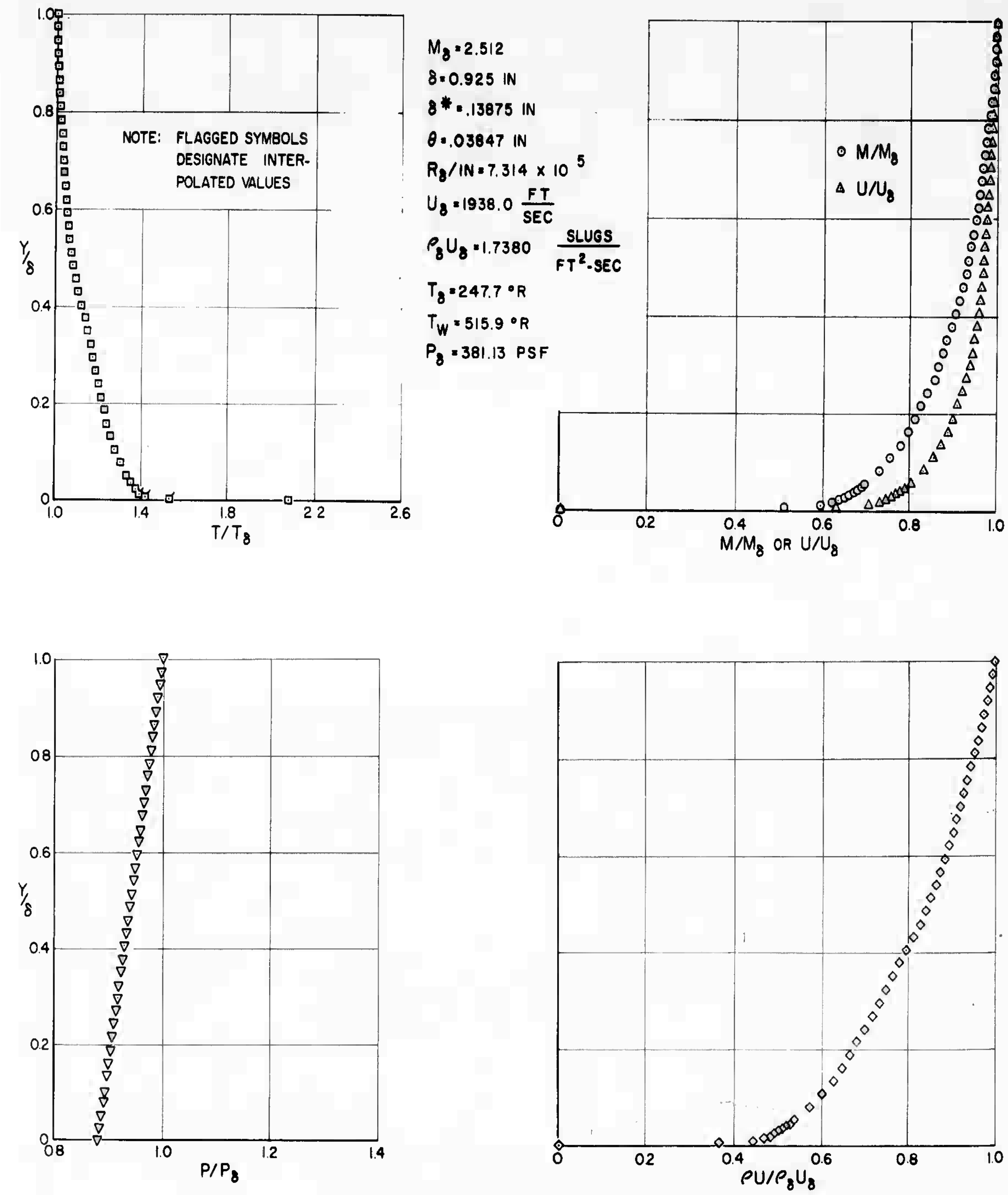
(h) $M_\infty = 2.58$, Station 6, $T_W/T_\delta = 1.934$.

Figure 21.- Continued.



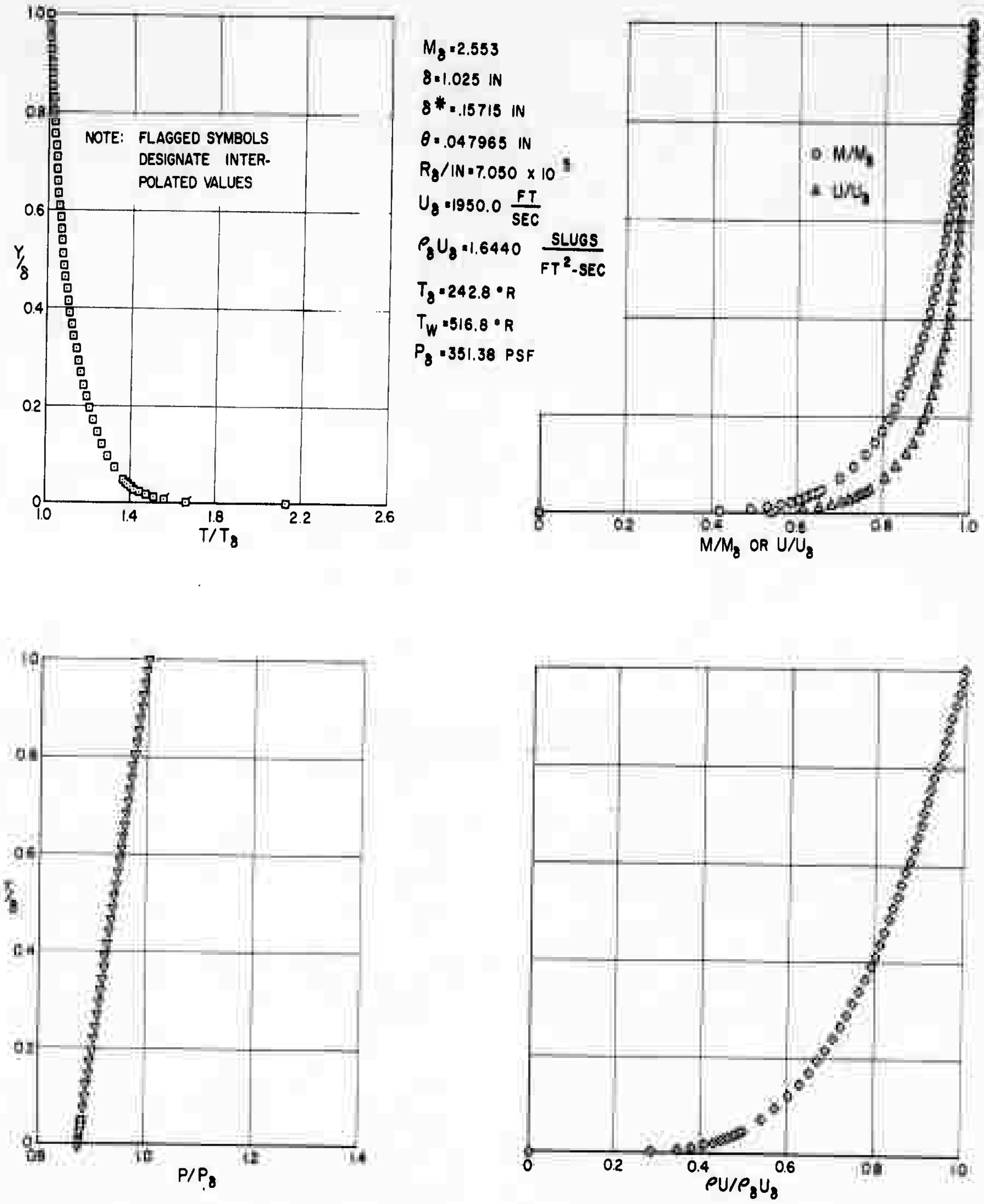
(i) $M_\infty = 2.58$, Station 8, $T_W/T_\delta = 2.086$.

Figure 21.- Continued.



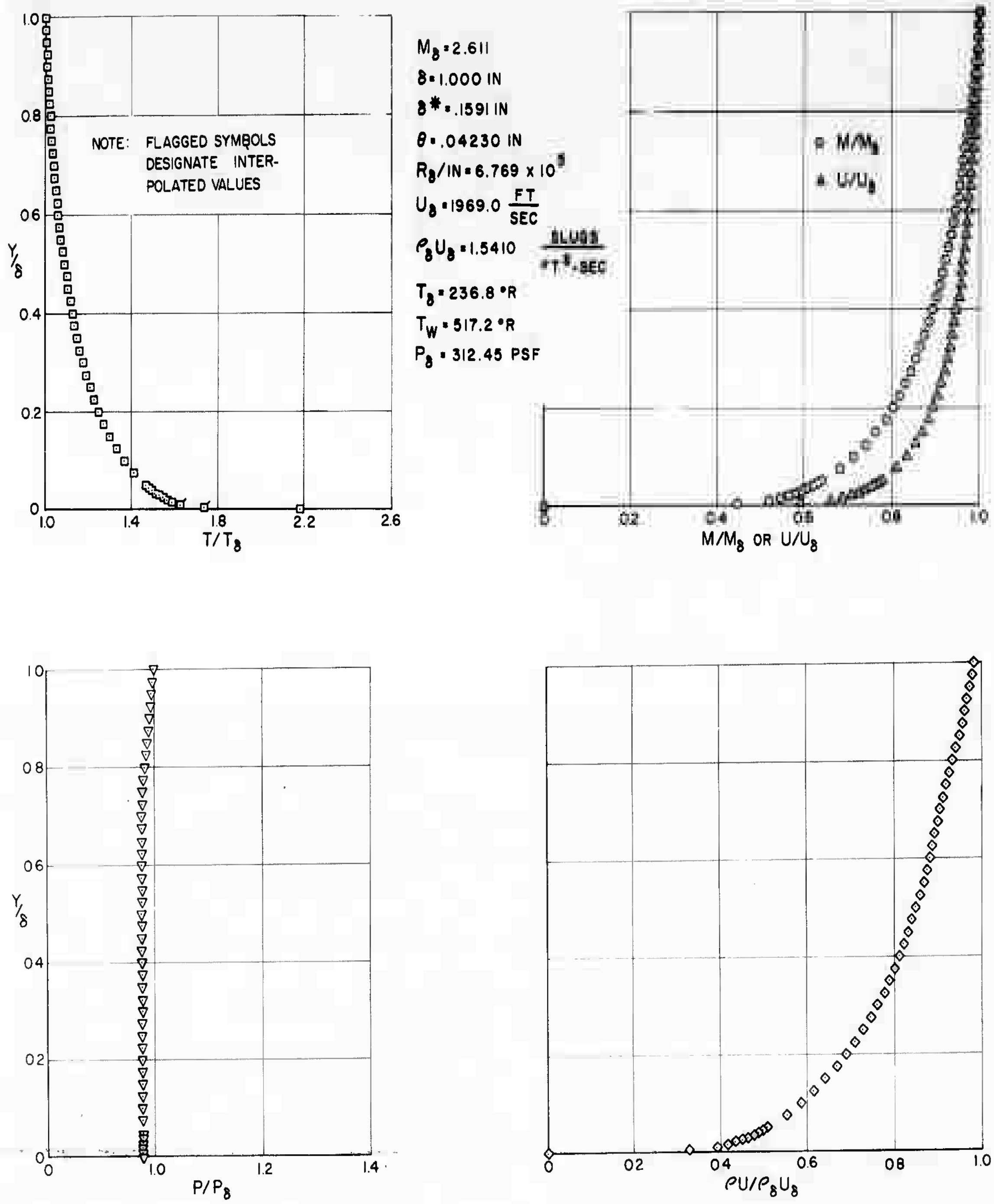
(j) $M_\infty = 2.58$, Station 10, $T_W/T_\delta = 2.082$.

Figure 21.- Continued.



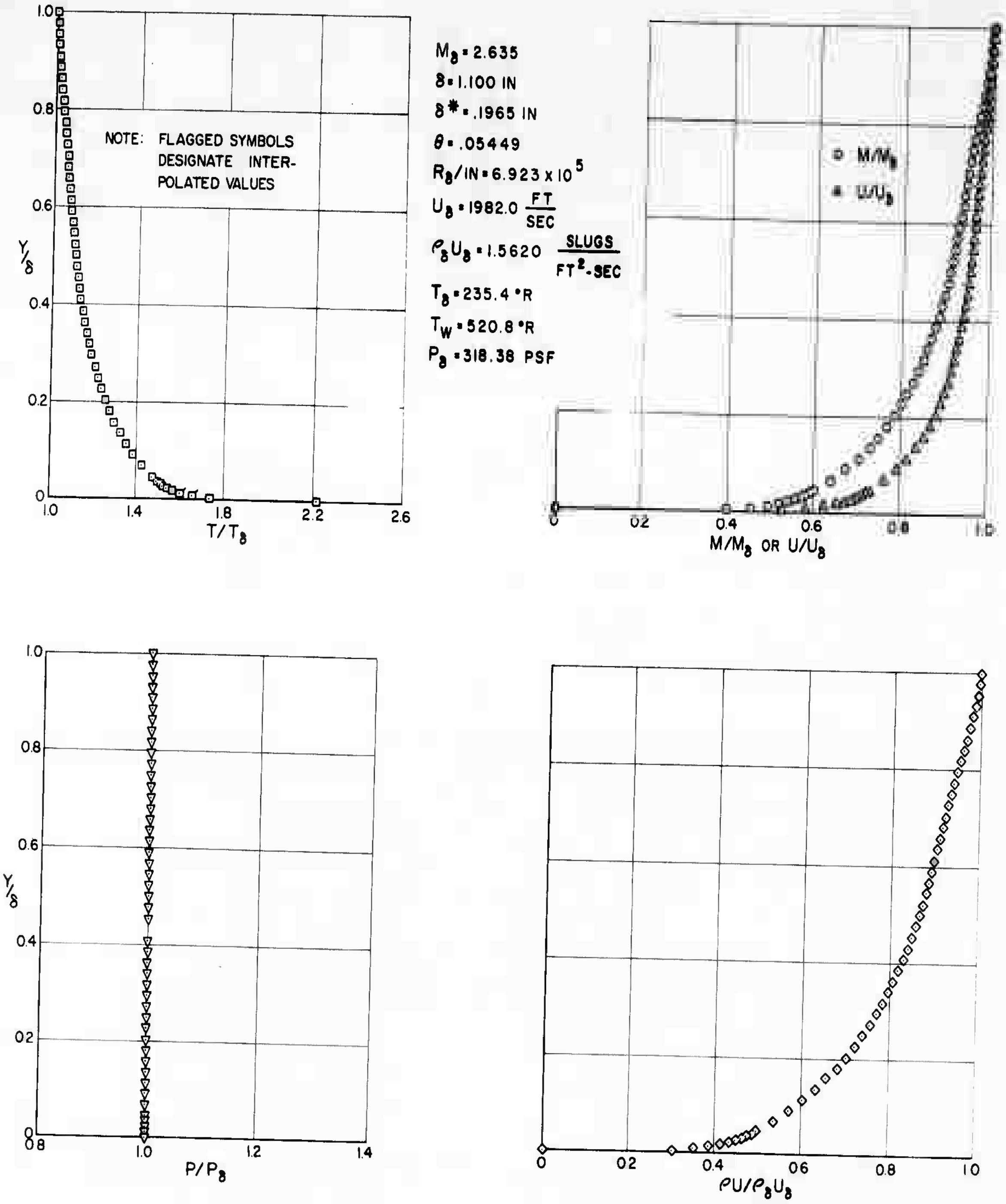
(k) $M_\infty = 2.58$, Station 12, $T_w/T_\delta = 2.128$.

Figure 21.- Continued.



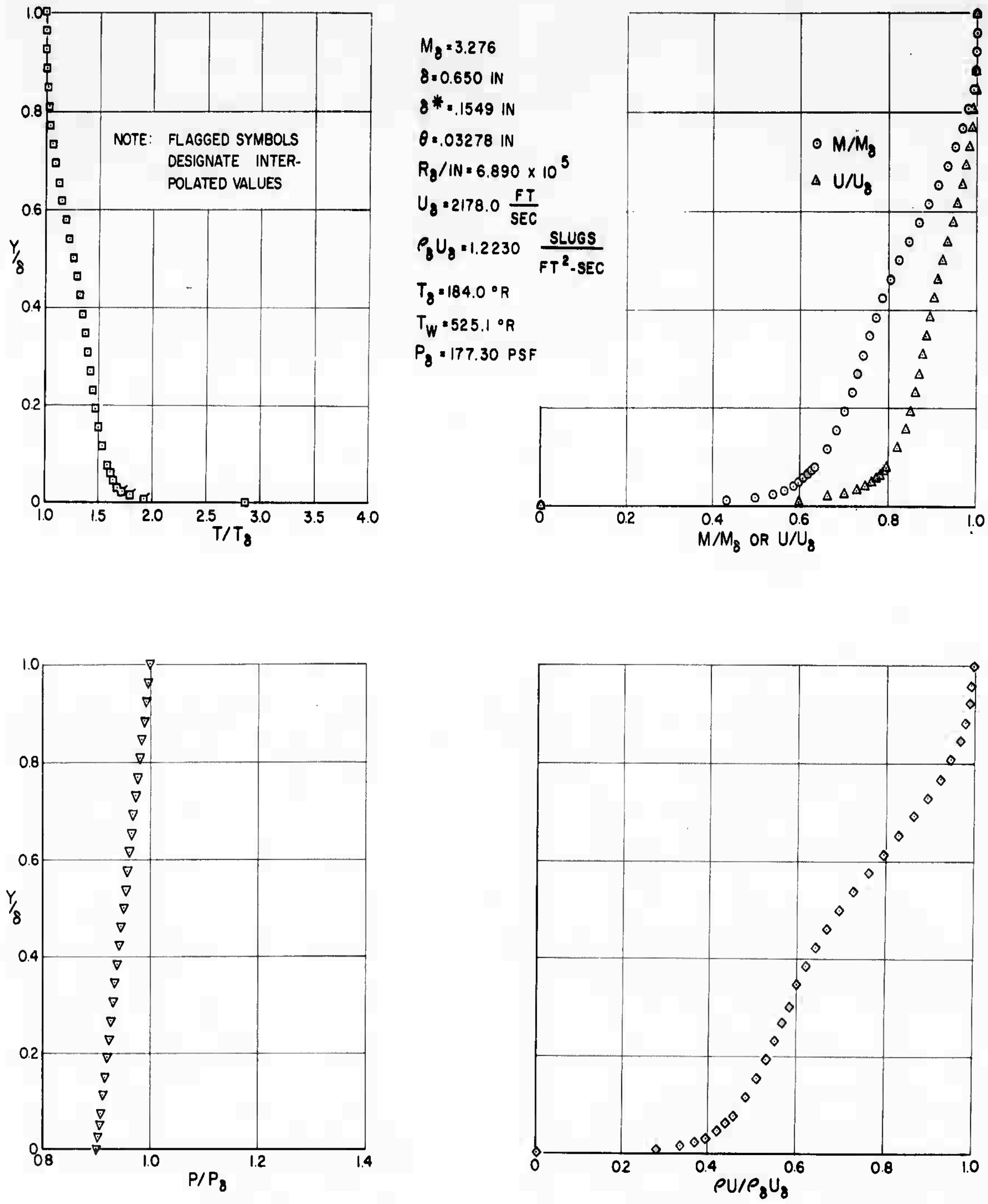
(l) $M_\infty = 2.58$, Station 14, $T_W/T_\delta = 2.184$.

Figure 21.- Continued.



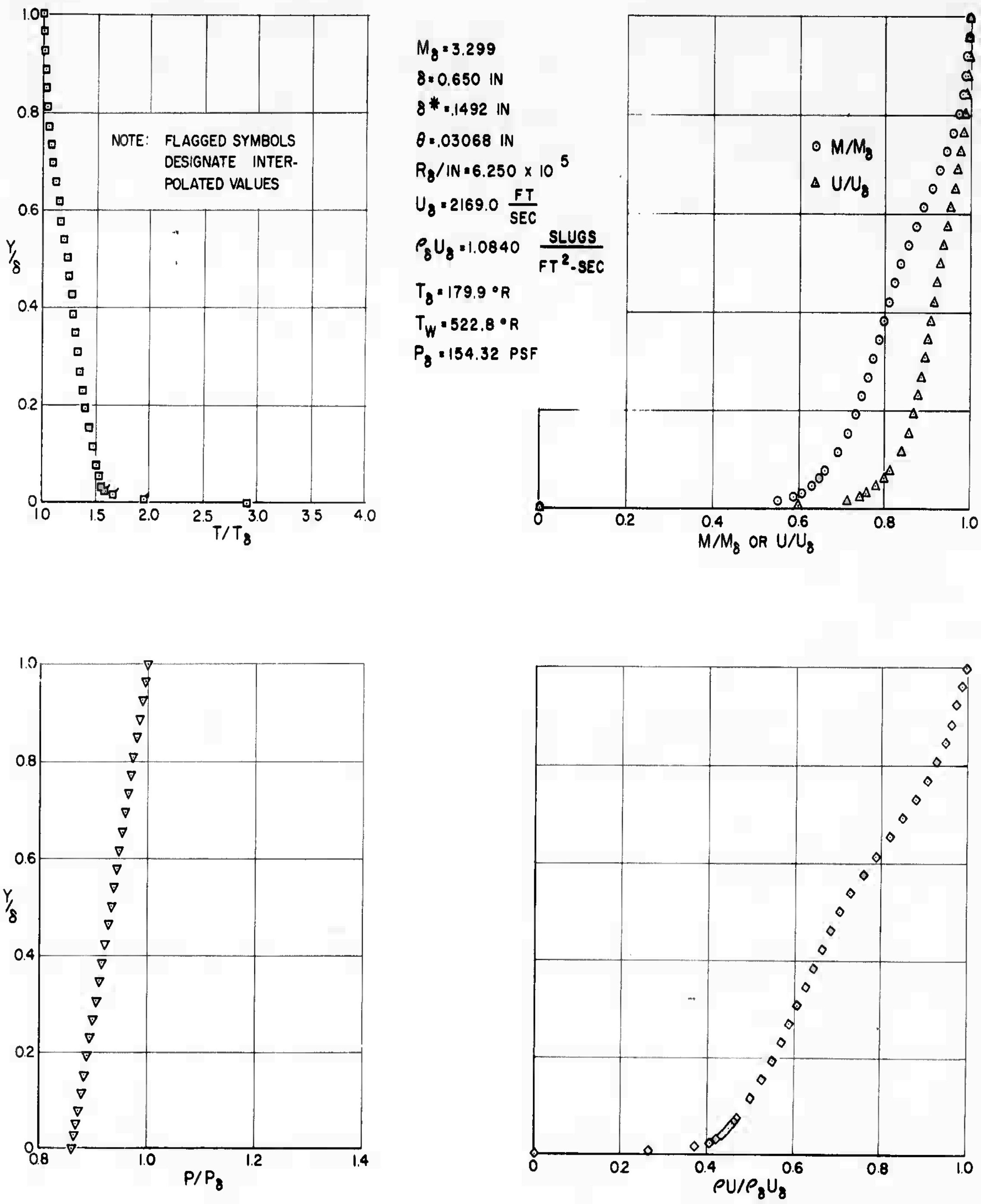
(m) $M_\infty = 2.58$, Station 18, $T_w/T_\delta = 2.212$.

Figure 21.- Continued.



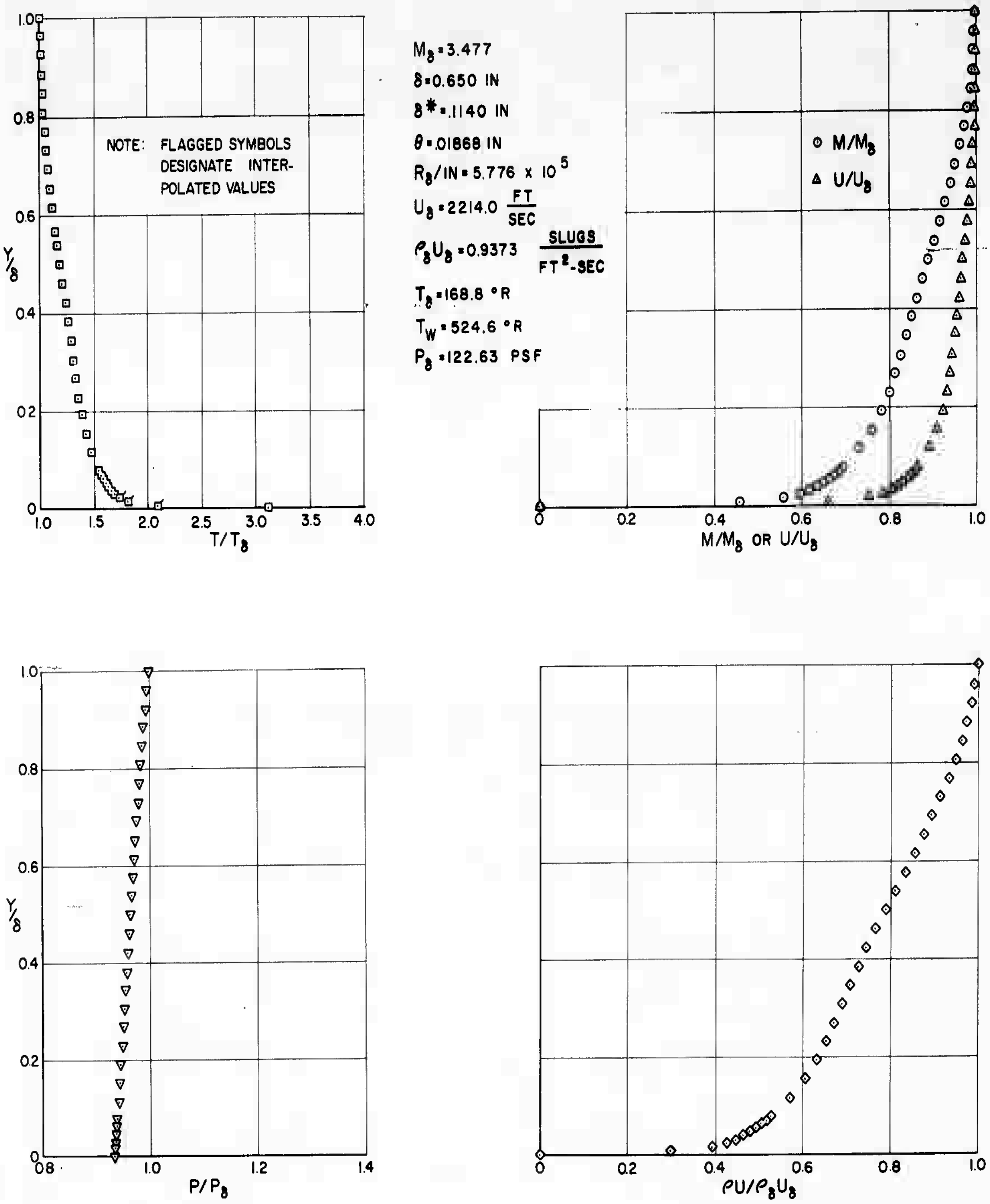
(n) $M_\infty = 3.30$, Station 8, $T_W/T_\delta = 2.853$.

Figure 21.- Continued.



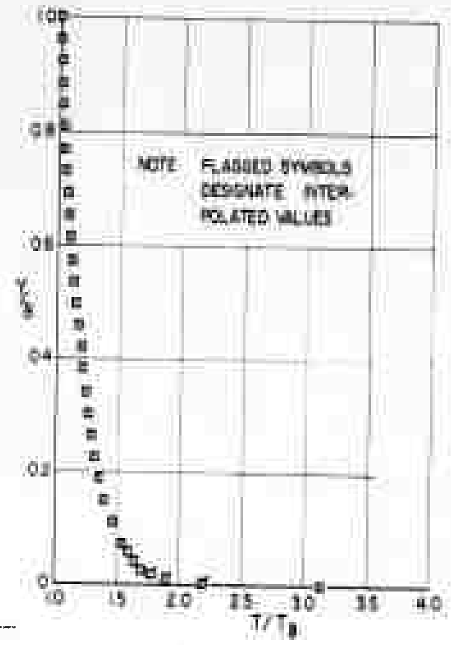
(o) $M_\infty = 3.30$, Station 10, $T_W/T_\delta = 2.906$.

Figure 21.- Continued.

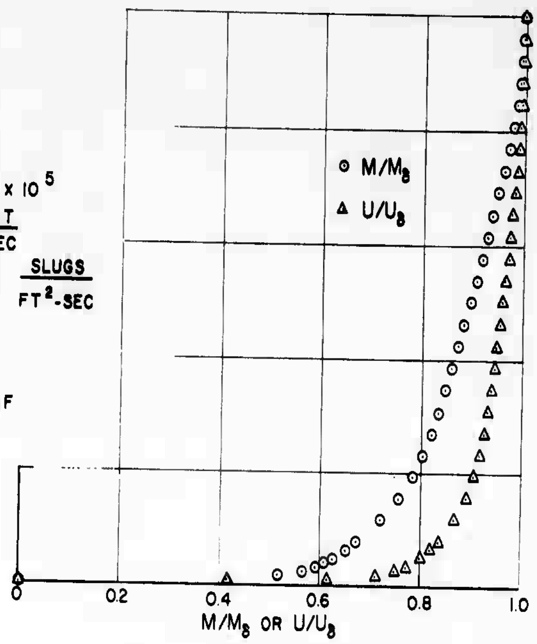


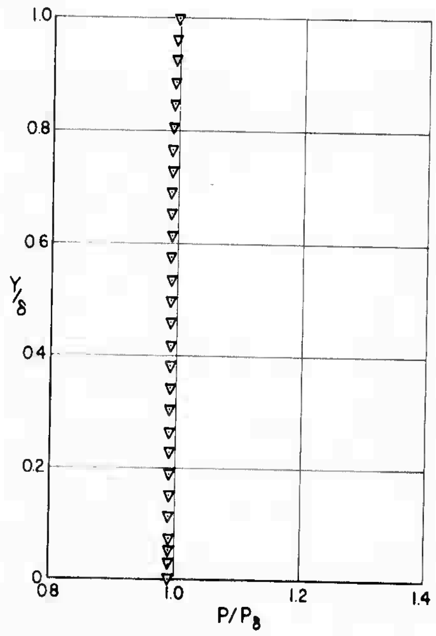
(p) $M_\infty = 3.30$, Station 12, $T_W/T_\delta = 3.107$.

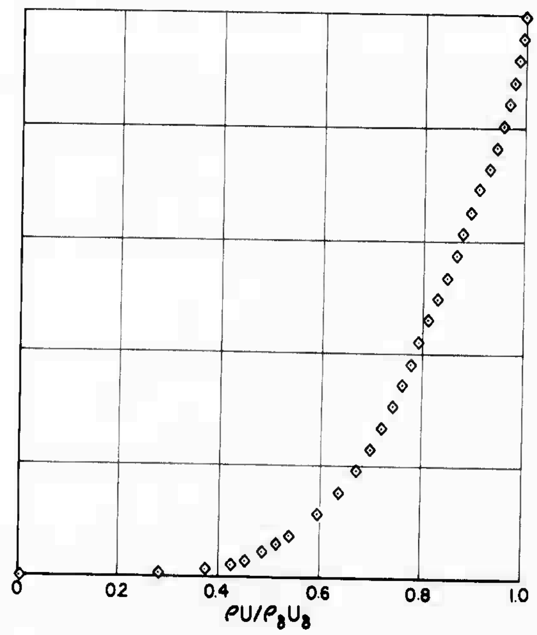
Figure 21.- Continued.



$M_\delta = 3.503$
$\delta = 0.650$ IN
$\delta^* = .1205$ IN
$\theta = .02369$ IN
$R_\delta/IN = 5.759 \times 10^5$
$U_\delta = 2223.0 \frac{FT}{SEC}$
$\rho_\delta U_\delta = 0.9283 \frac{SLUGS}{FT^2\text{-}SEC}$
$T_\delta = 167.6$ °R
$T_W = 524.9$ °R
$P_\delta = 120.09$ PSF

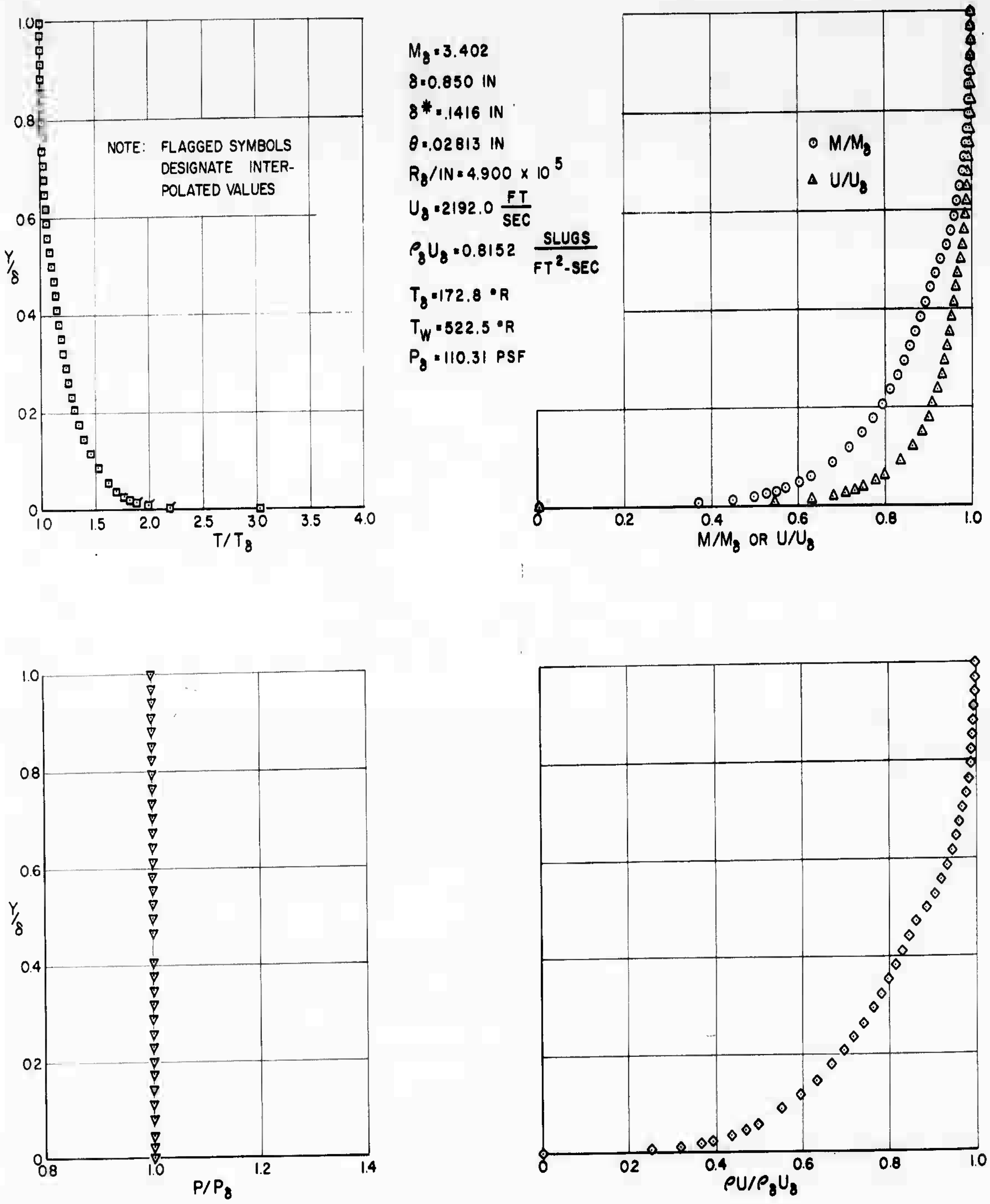






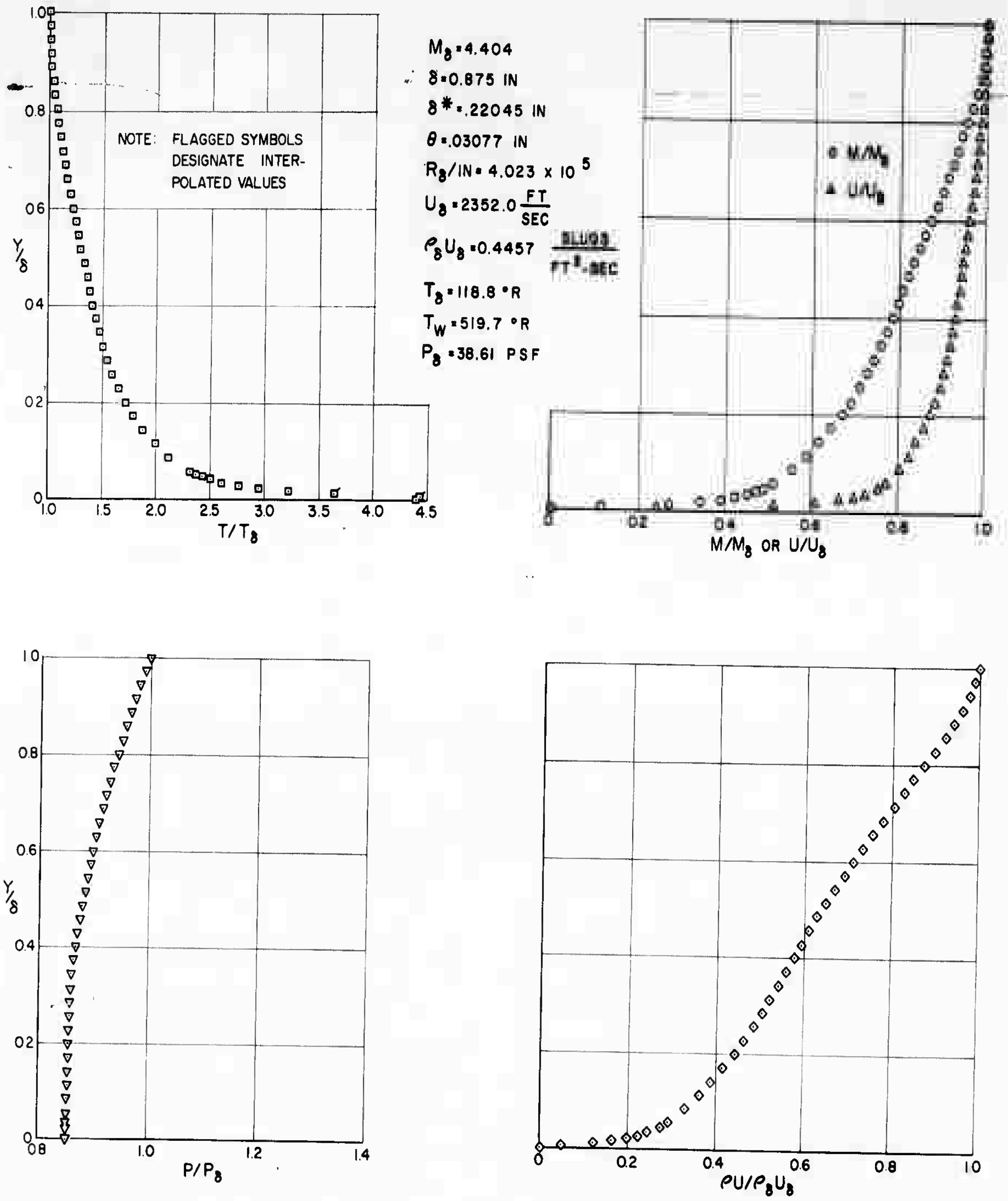
(q) $M_\infty = 3.30$, Station 14, $T_W/T_\delta = 3.131$.

Figure 21.- Continued.



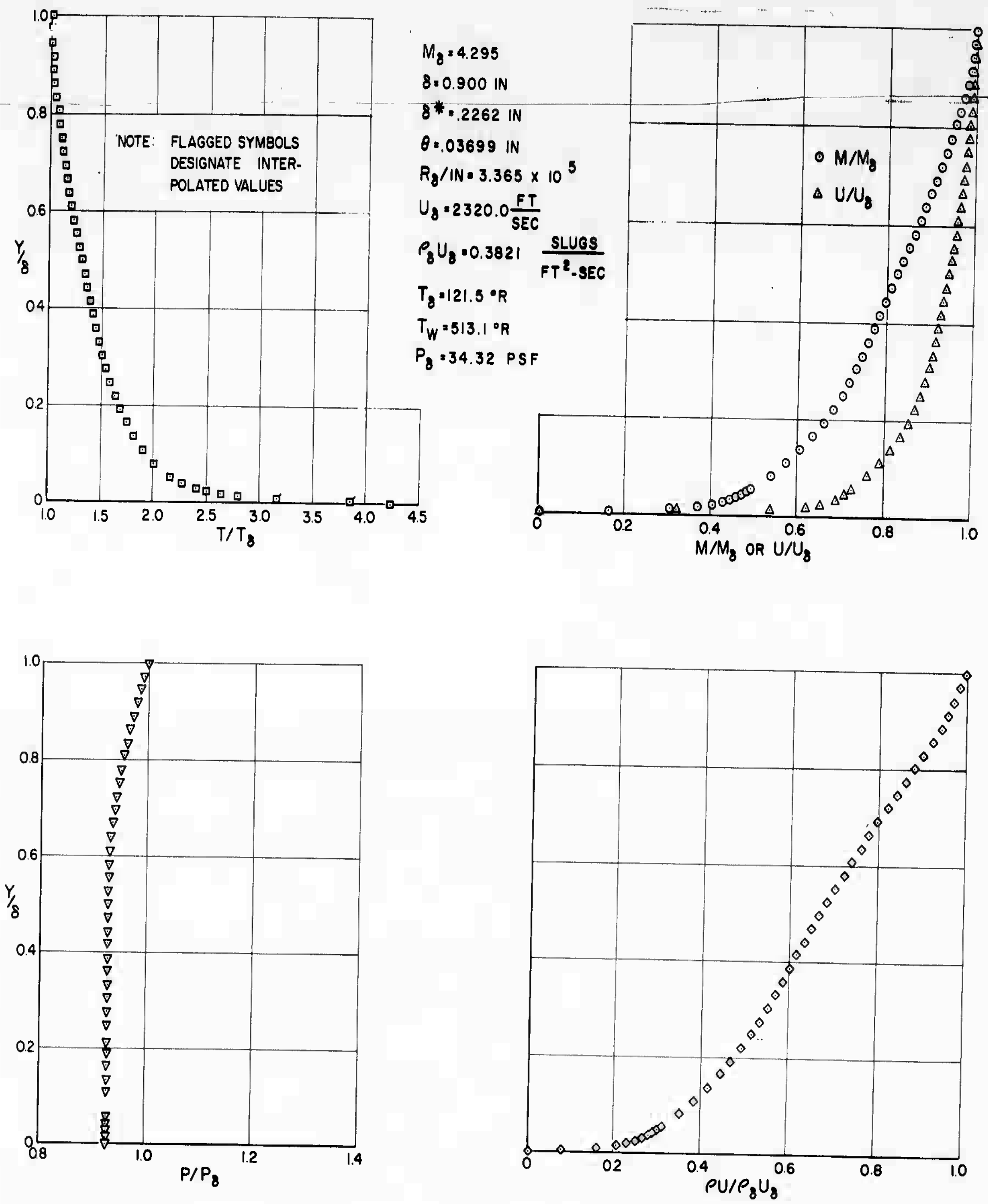
(r) $M_\infty = 3.30$, Station 18, $T_W/T_\delta = 3.023$.

Figure 21.- Continued.



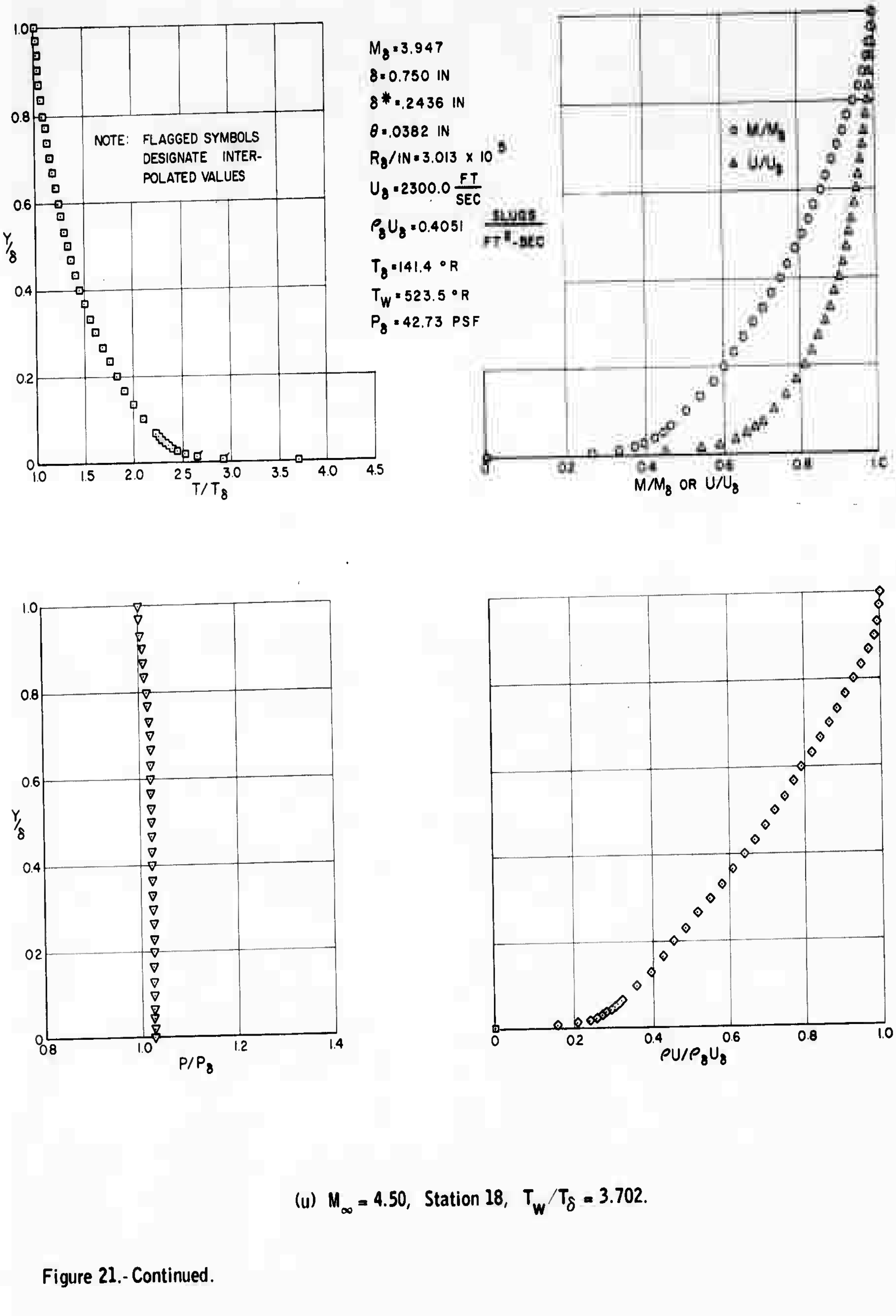
(s) $M_\infty = 4.50$, Station 12, $T_W/T_\delta = 4.374$.

Figure 21.- Continued.



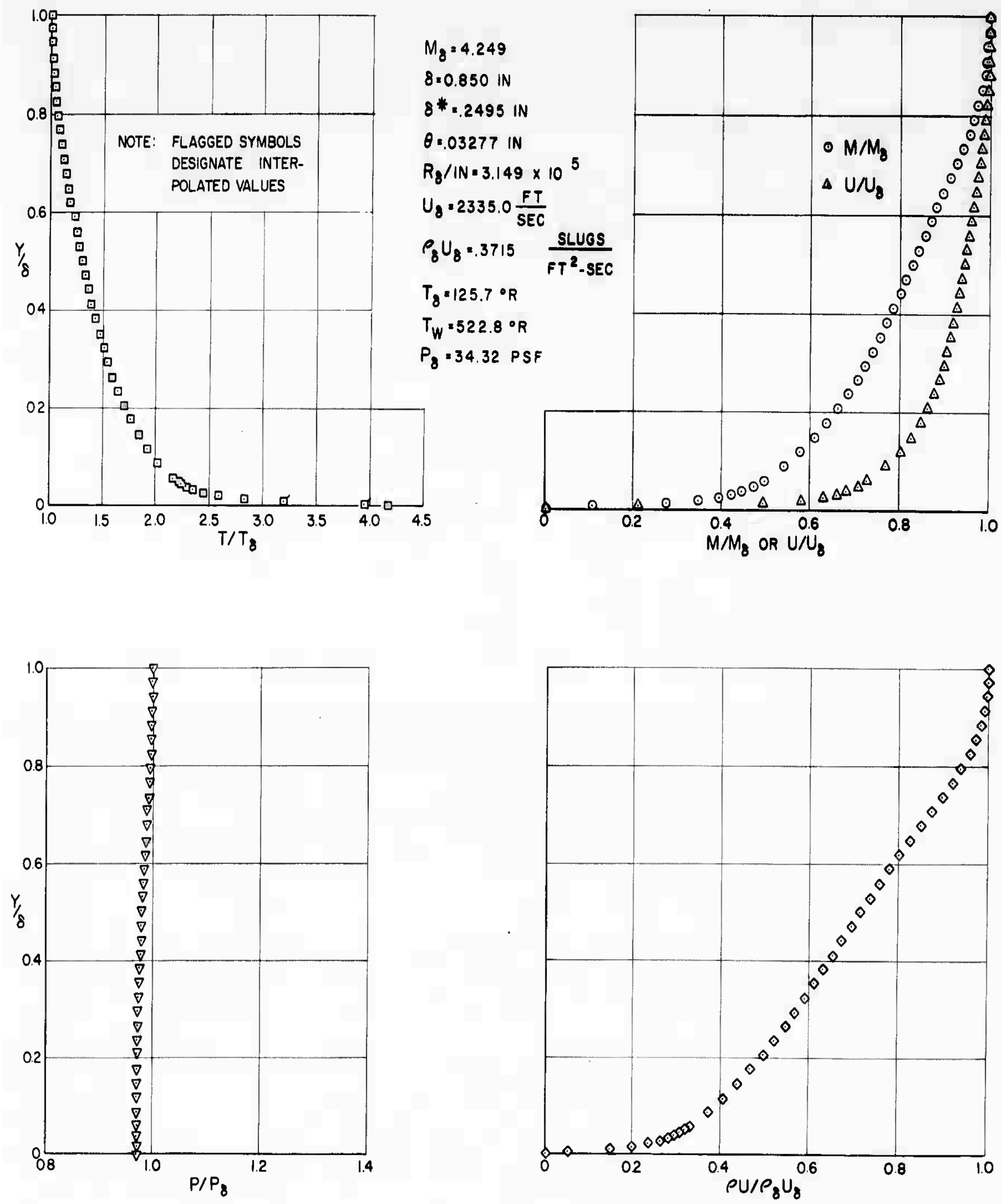
(t) $M_\infty = 4.50$, Station 14, $T_W/T_\delta = 4.223$.

Figure 21.- Continued.



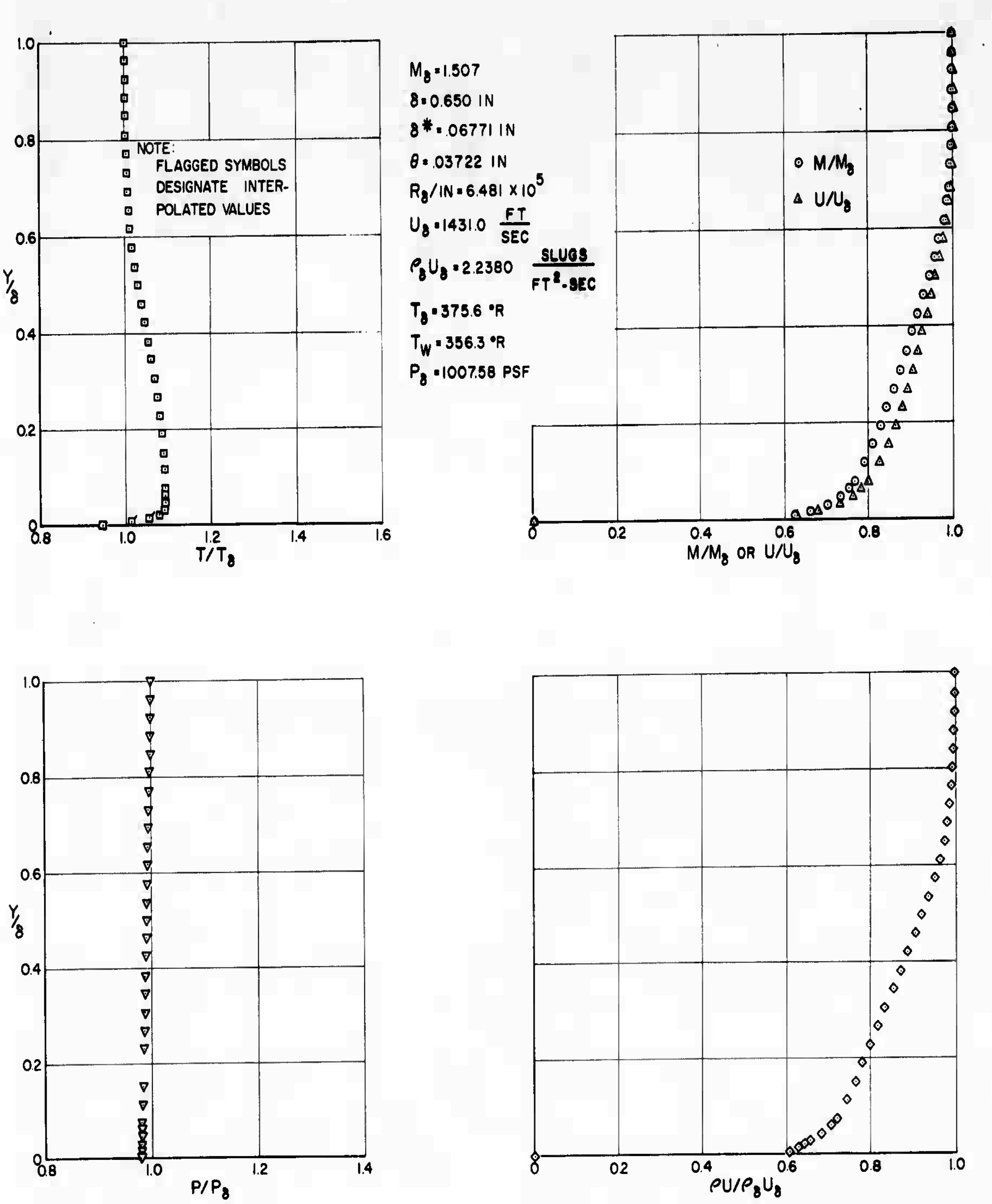
(u) $M_\infty = 4.50$, Station 18, $T_W/T_\delta = 3.702$.

Figure 21.- Continued.



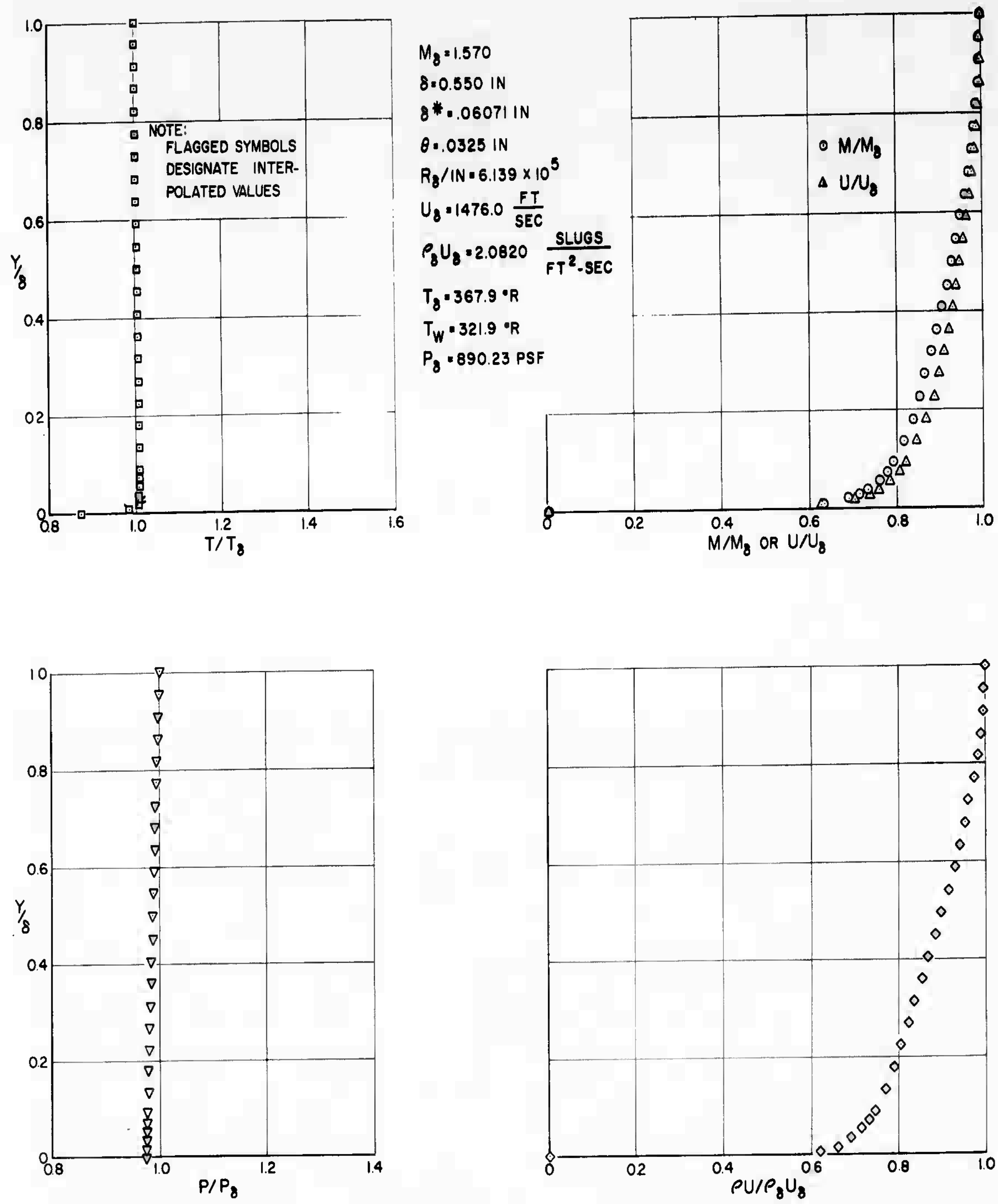
(v) $M_\infty = 4.50$, Station 22, $T_W/T_\delta = 4.159$.

Figure 21.- Concluded.



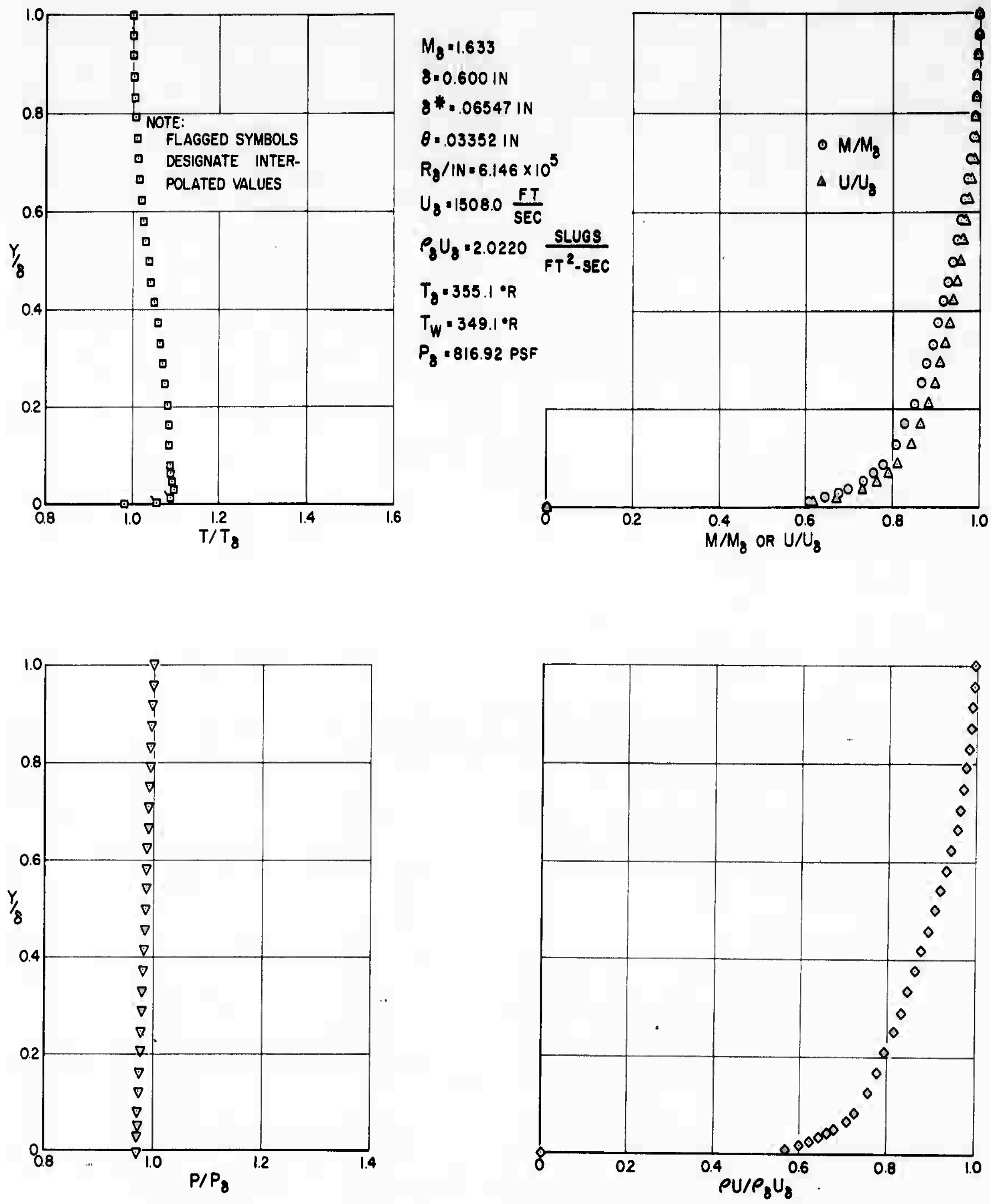
(a) $M_\infty = 1.61$, Station 6, $T_W/T_\delta = .9486$.

Figure 22.- Profiles of temperature, velocity, Mach number, static pressure, and mass flow for the convex center section with a cooled wall.



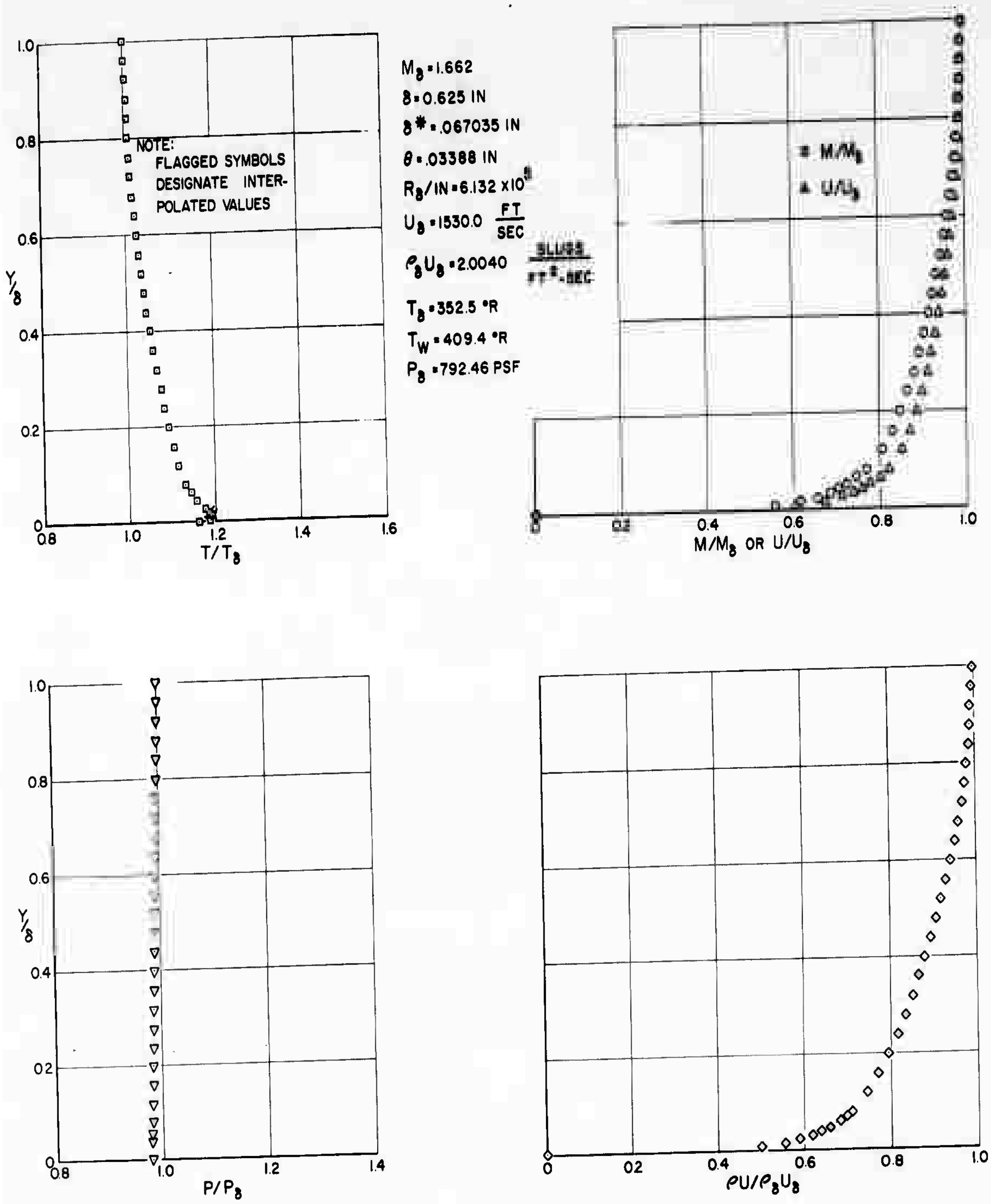
(b) $M_\infty = 1.61$, Station 8, $T_W/T_\delta = .8749$.

Figure 22.- Continued.



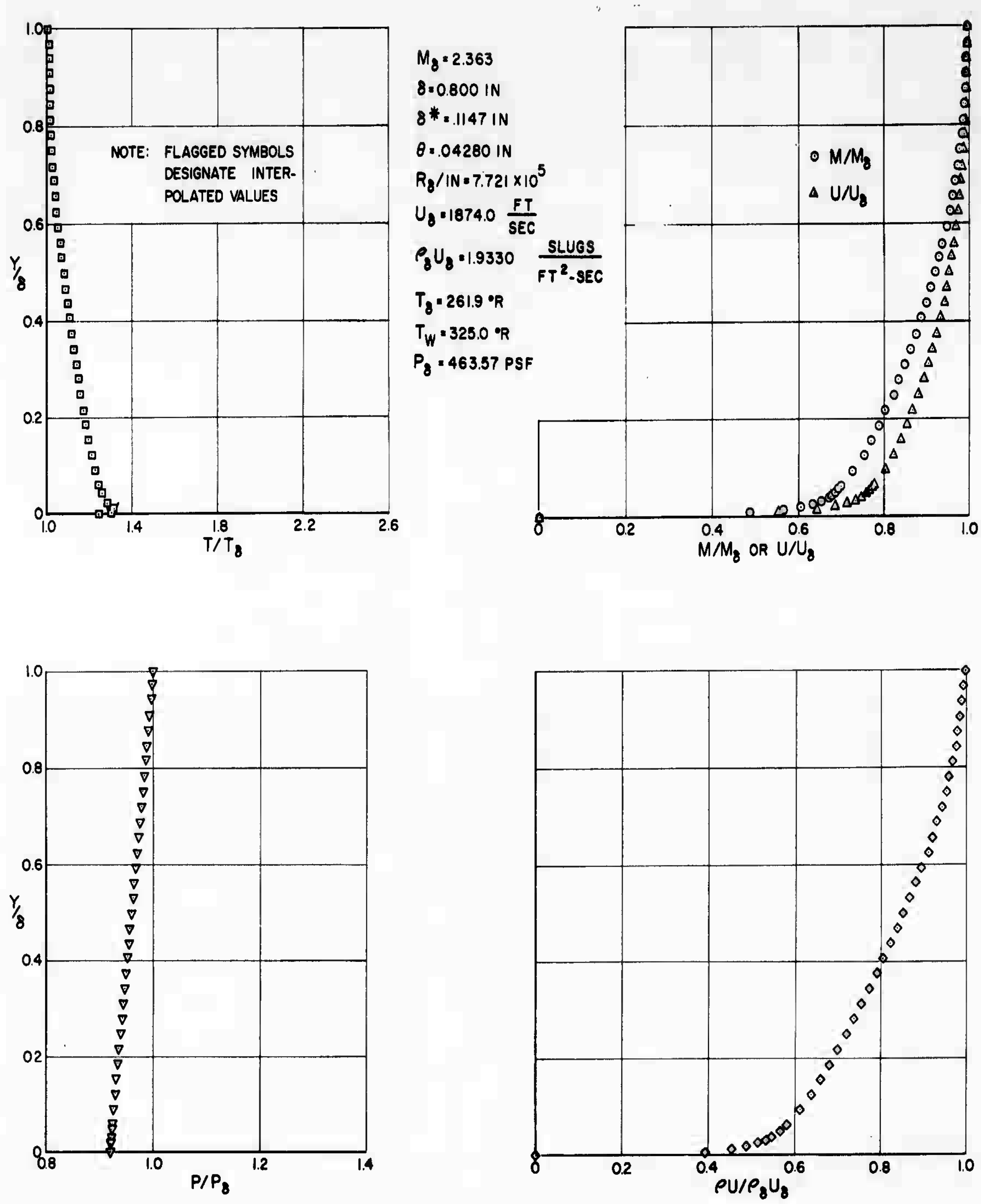
(c) $M_\infty = 1.61$, Station 10, $T_W/T_\delta = .9831$.

Figure 22.- Continued.



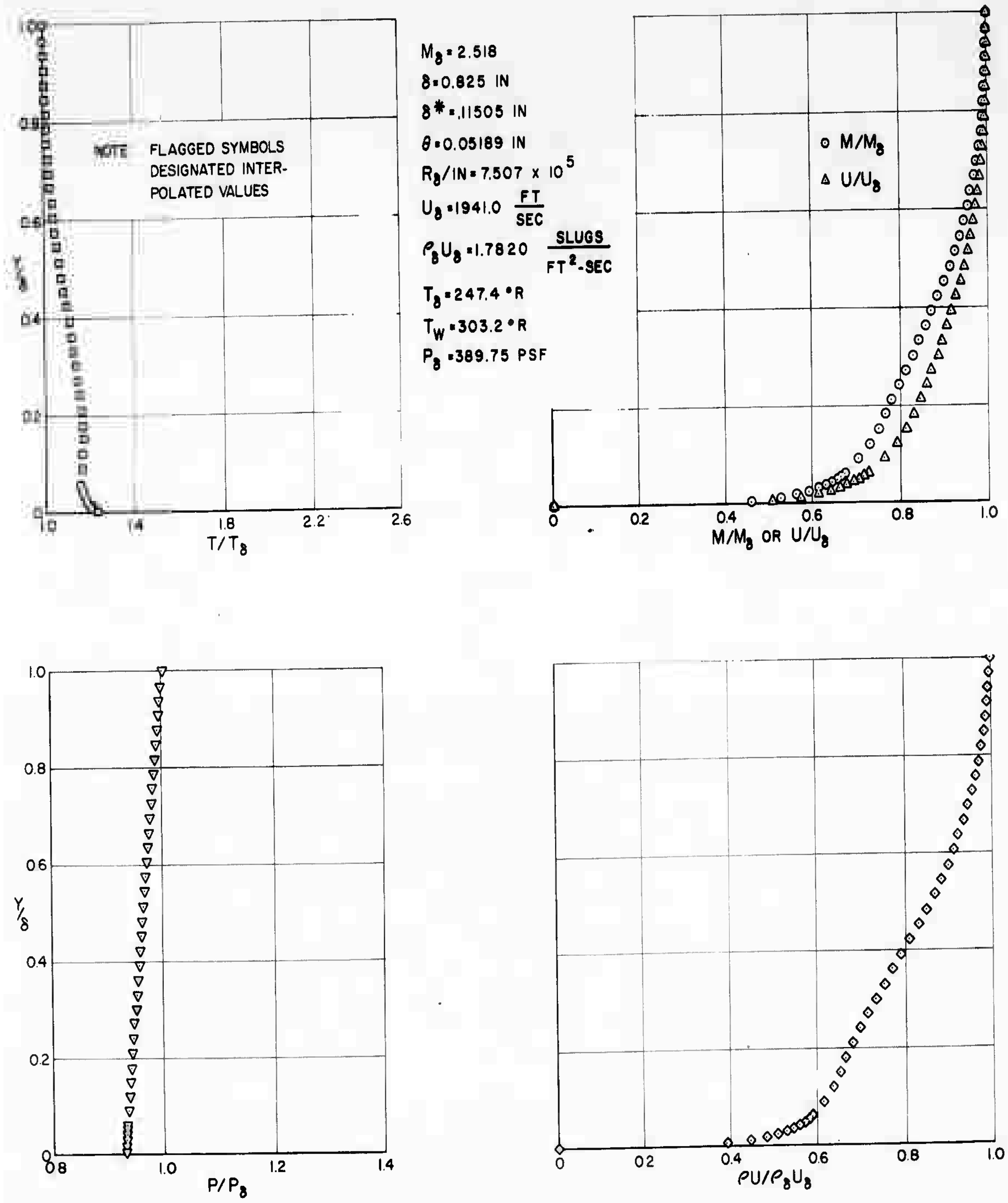
(d) $M_\infty = 1.61$, Station 12, $T_W/T_\delta = 1.161$.

Figure 22.- Continued



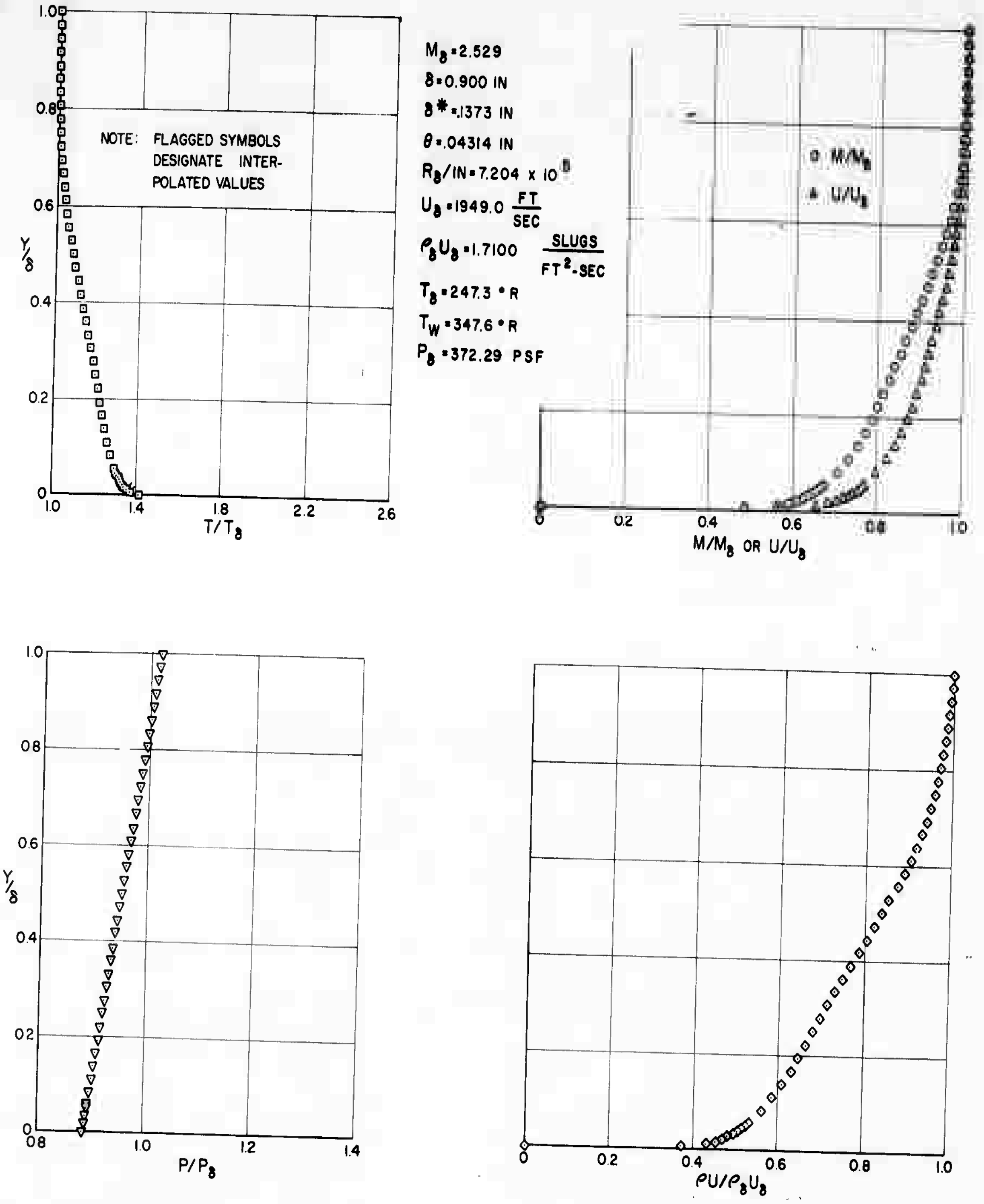
(e) $M_\infty = 2.58$, Station 6, $T_W/T_\delta = 1.241$.

Figure 22.- Continued.



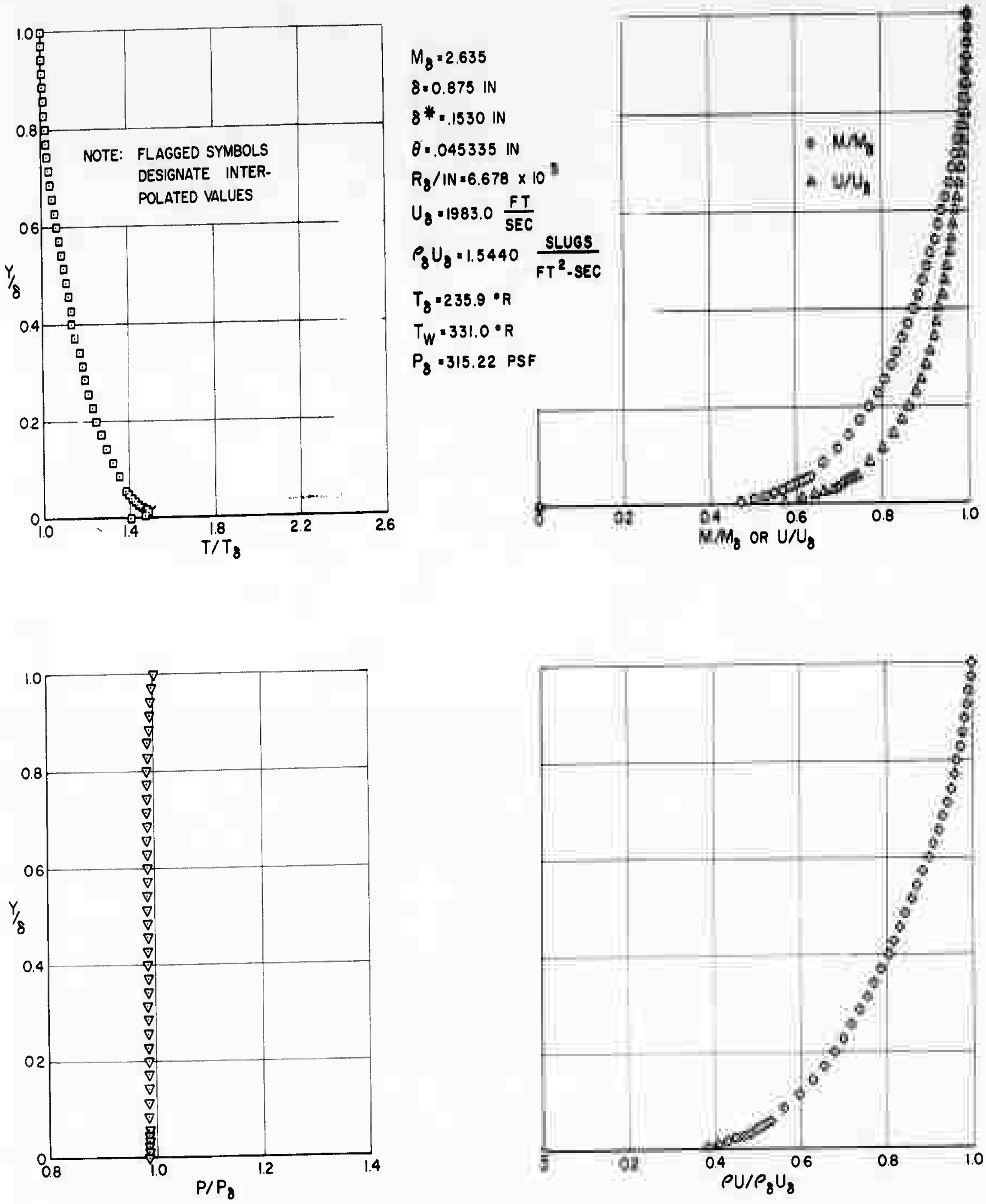
(f) $M_\infty = 2.58$, Station 8, $T_W/T_\delta = 1.225$.

Figure 22.- Continued.



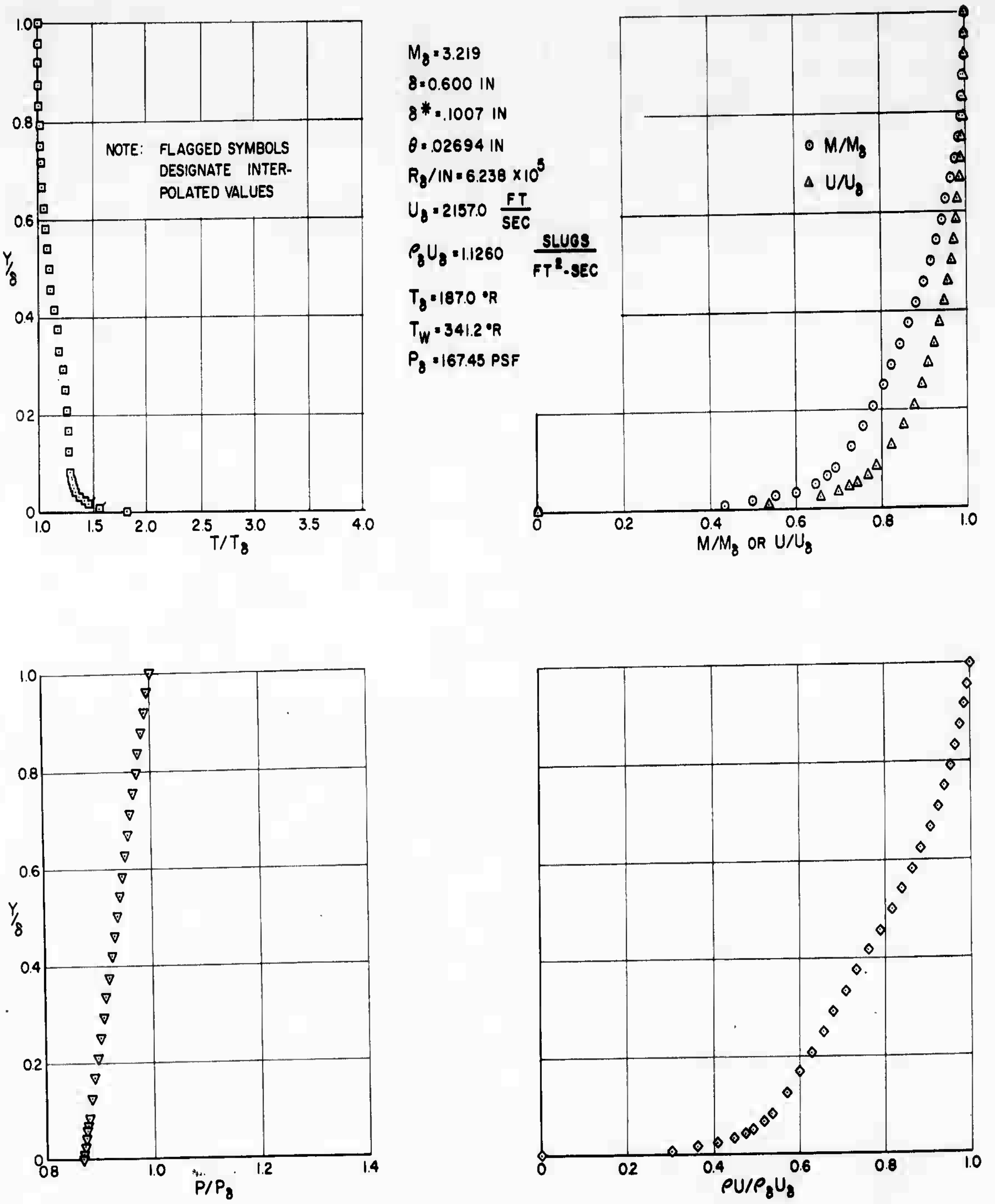
(g) $M_\infty = 2.58$, Station 10, $T_W/T_\delta = 1.405$.

Figure 22.- Continued.



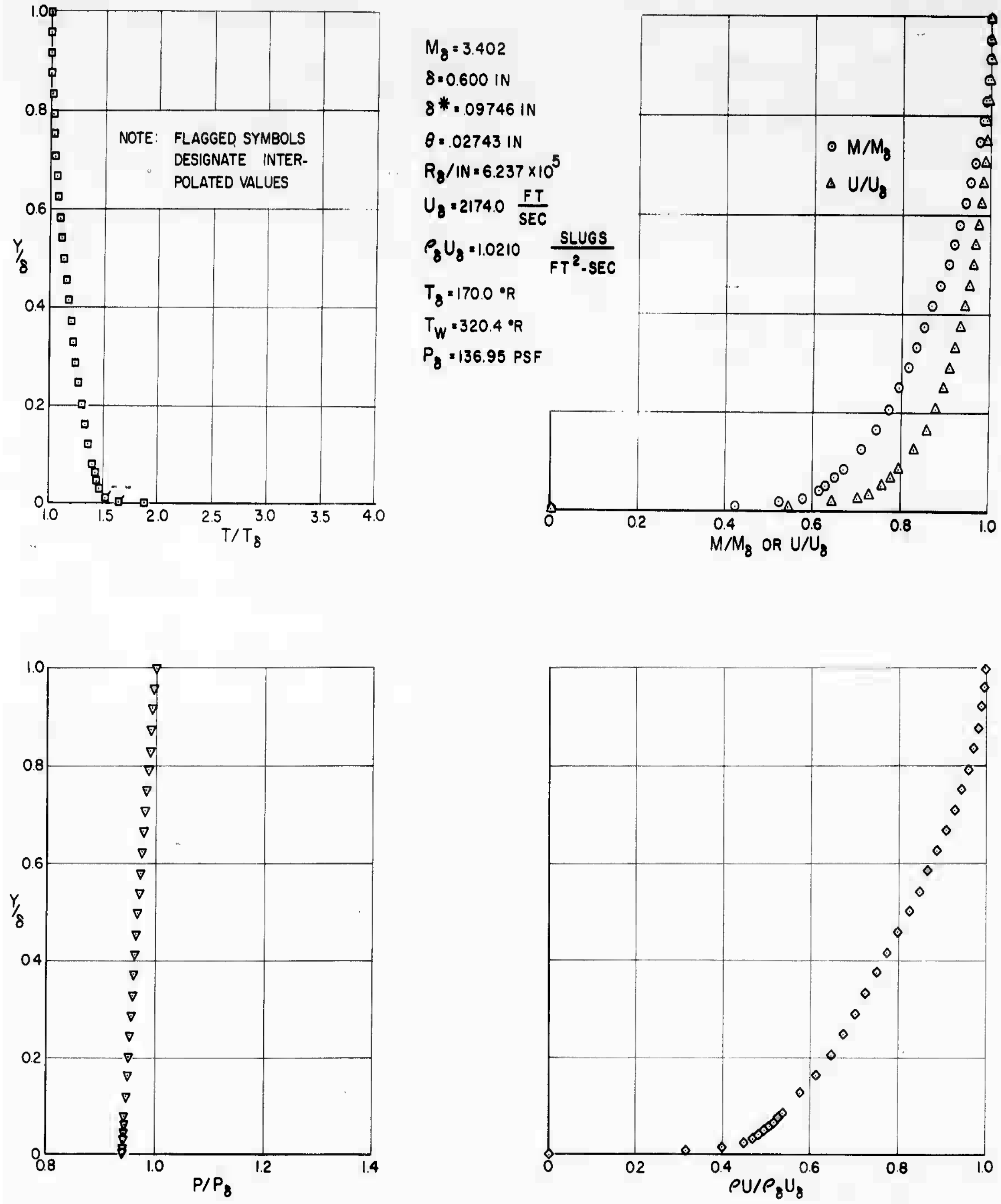
(h) $M_\infty = 2.58$, Station 14, $T_W/T_\delta = 1.403$.

Figure 22.- Continued.



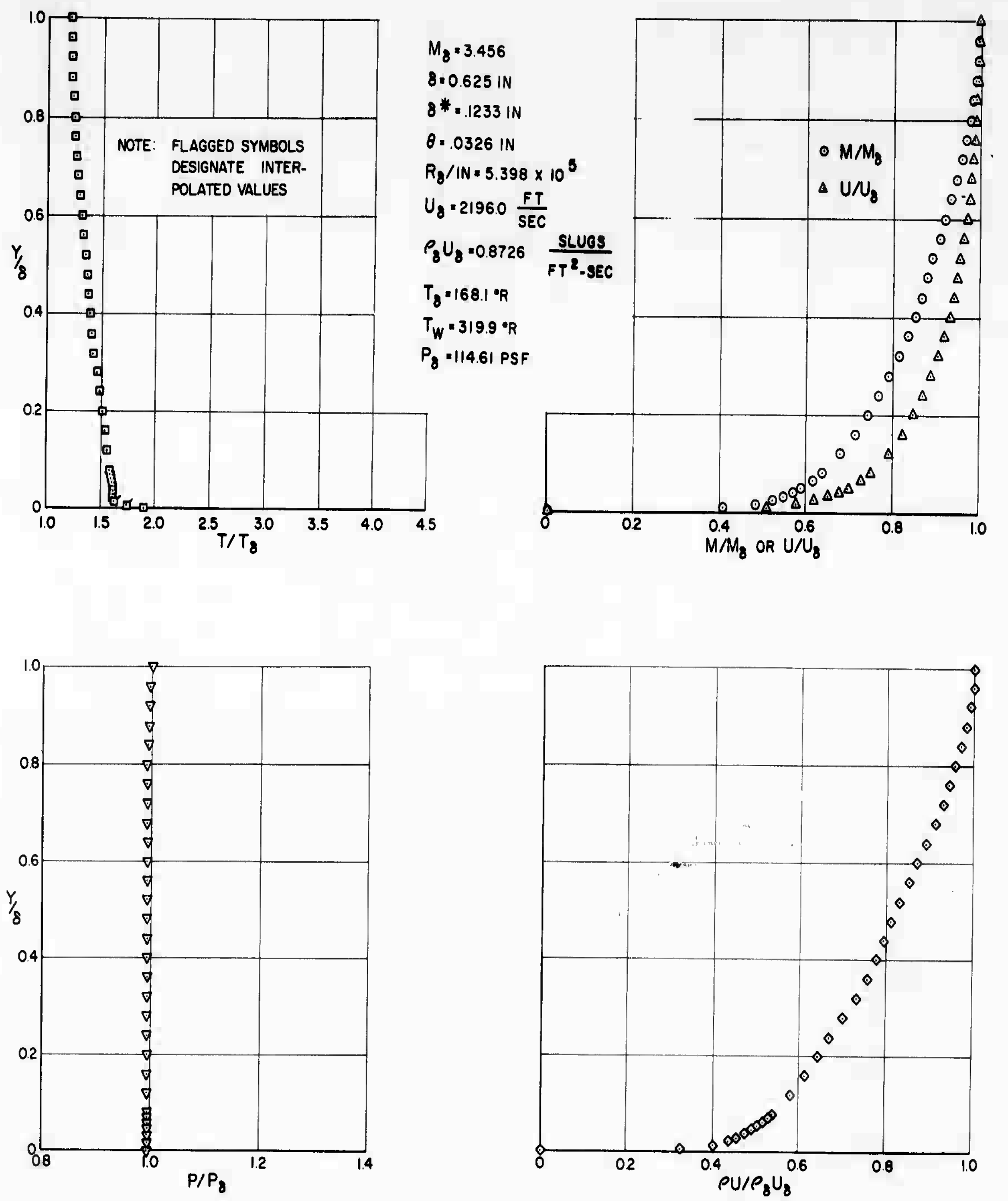
(i) M_∞ = 3.30, Station 10, T_W/T_δ = 1.824.

Figure 22.- Continued.



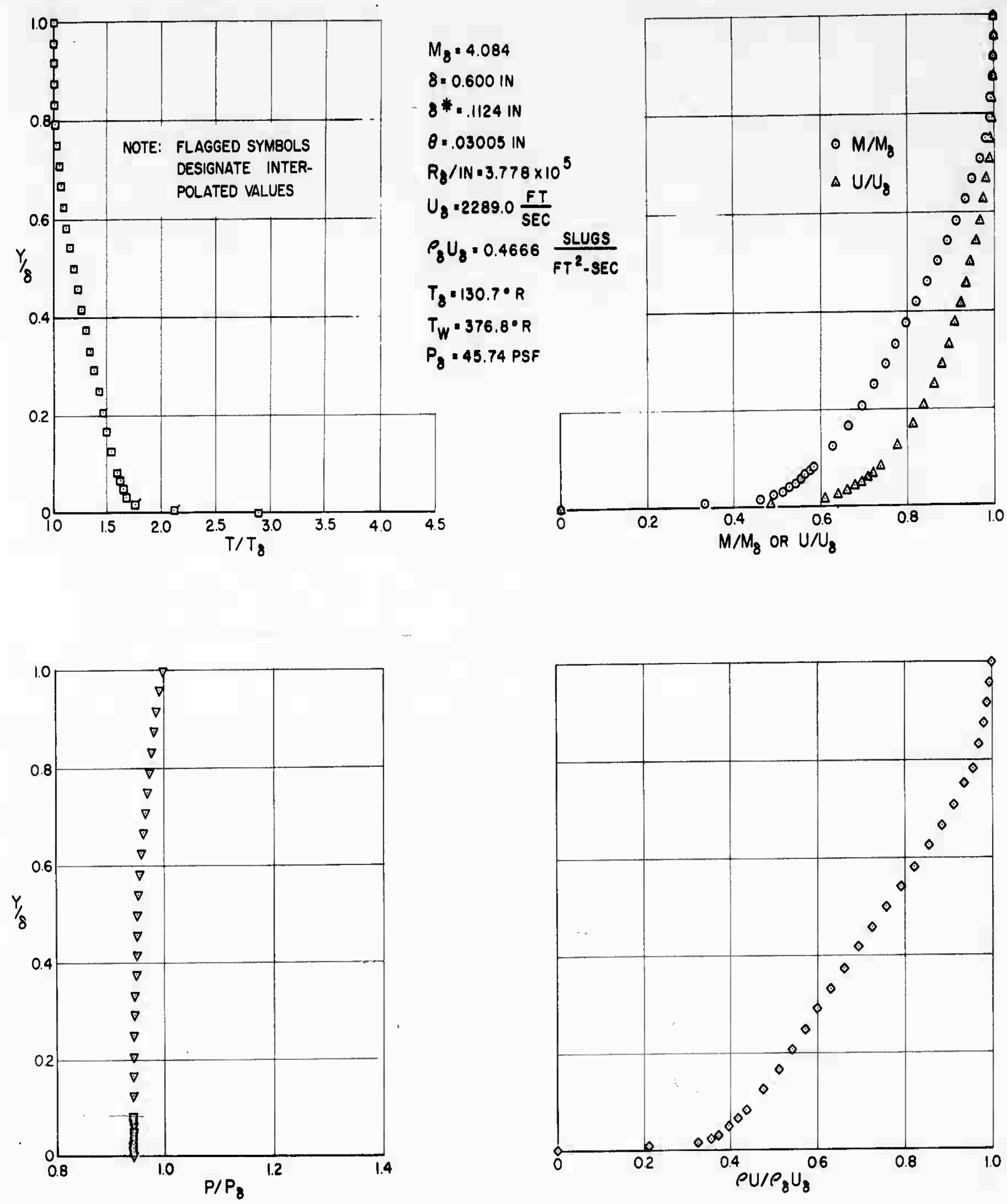
(j) $M_\infty = 3.30$, Station 12, $T_W/T_\delta = 1.884$.

Figure 22.- Continued.



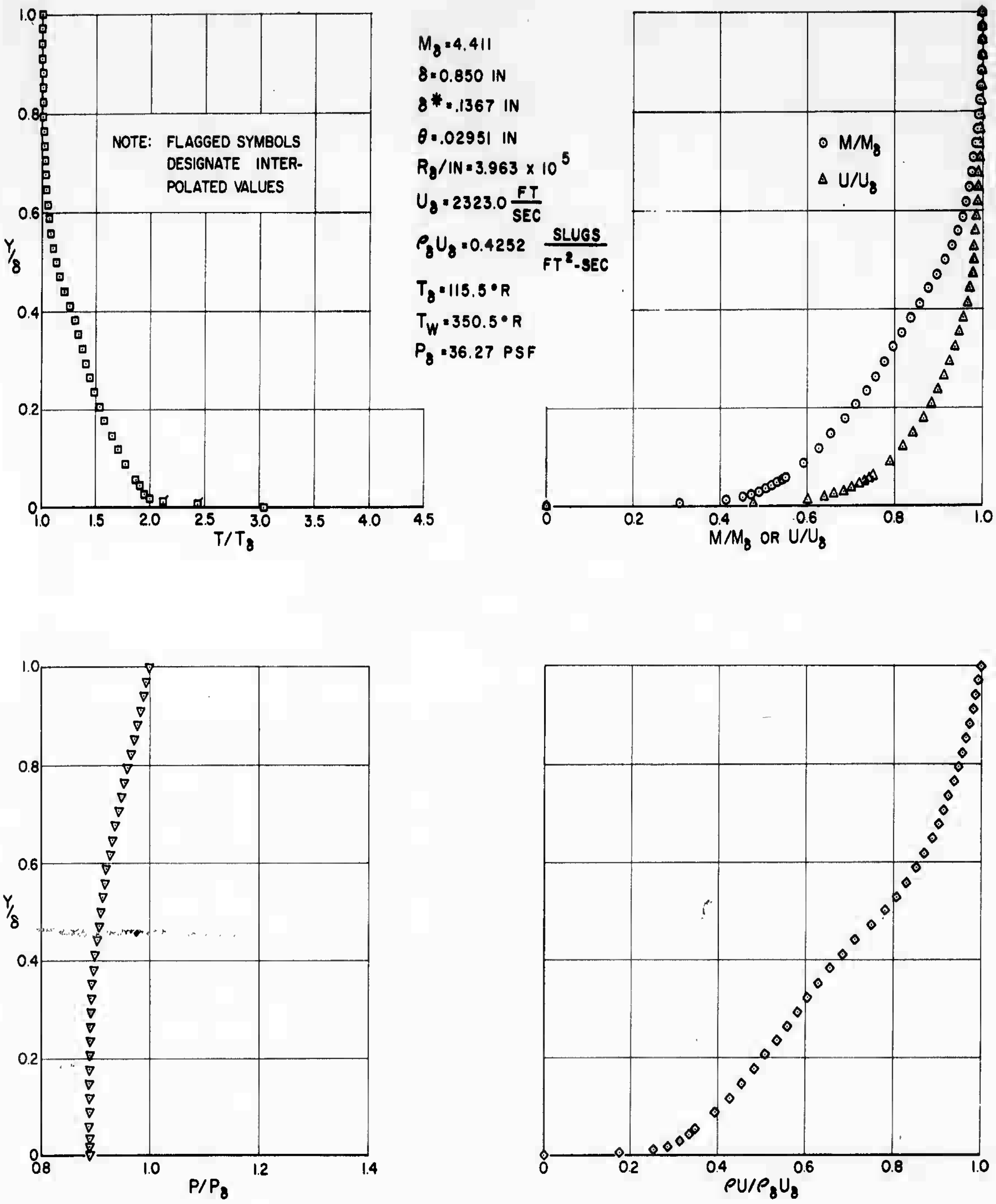
(k) $M_\infty = 3.30$, Station 14, $T_W/T_\delta = 1.903$.

Figure 22.- Continued.



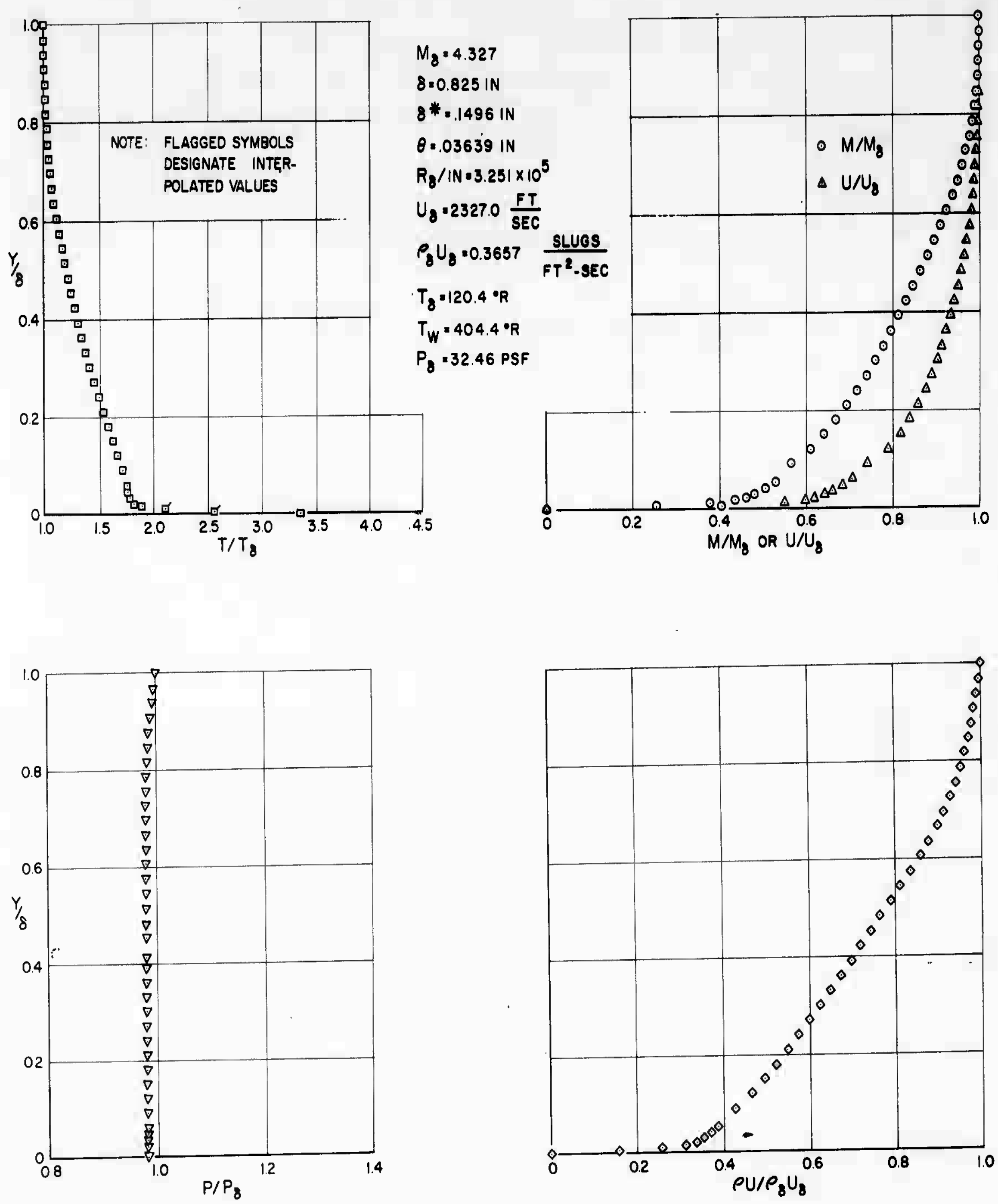
(l) M_∞ = 4.50, Station 10, T_W/T_δ = 2.882.

Figure 22.- Continued.



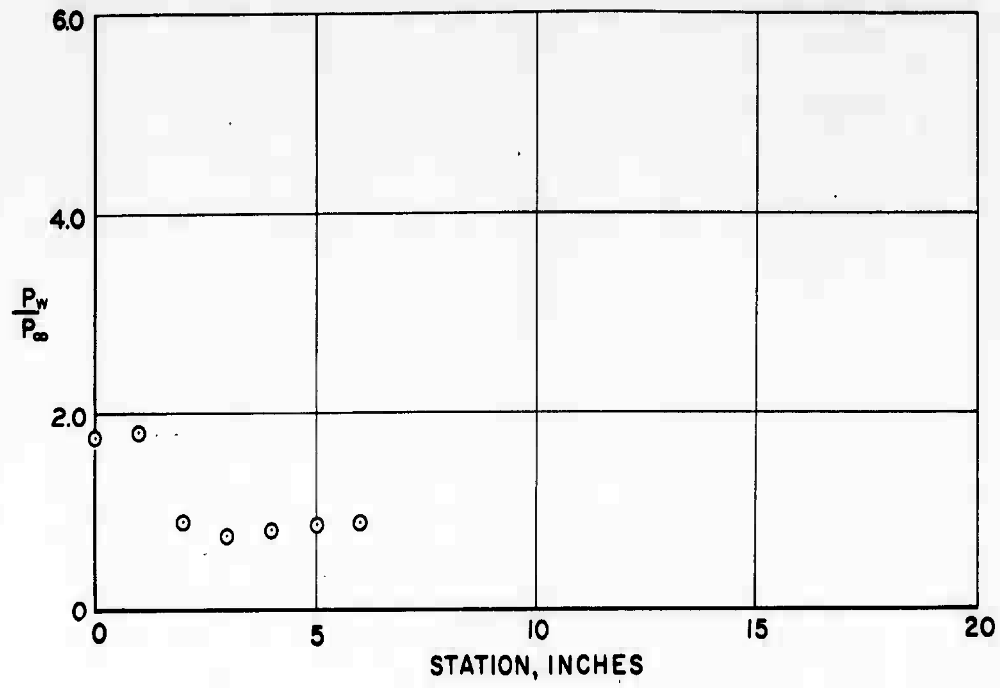
(m) $M_\infty = 4.50$, Station 12, $T_W/T_\delta = 3.034$.

Figure 22.- Continued.

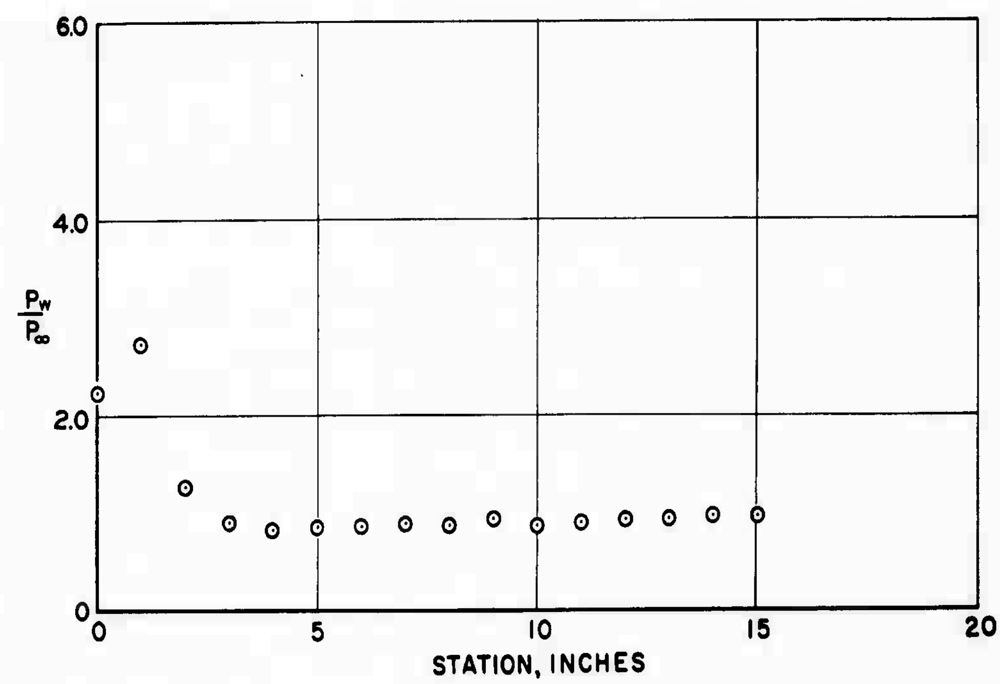


(n) $M_\infty = 4.50$, Station 14, $T_W/T_\delta = 3.358$.

Figure 22.- Concluded.

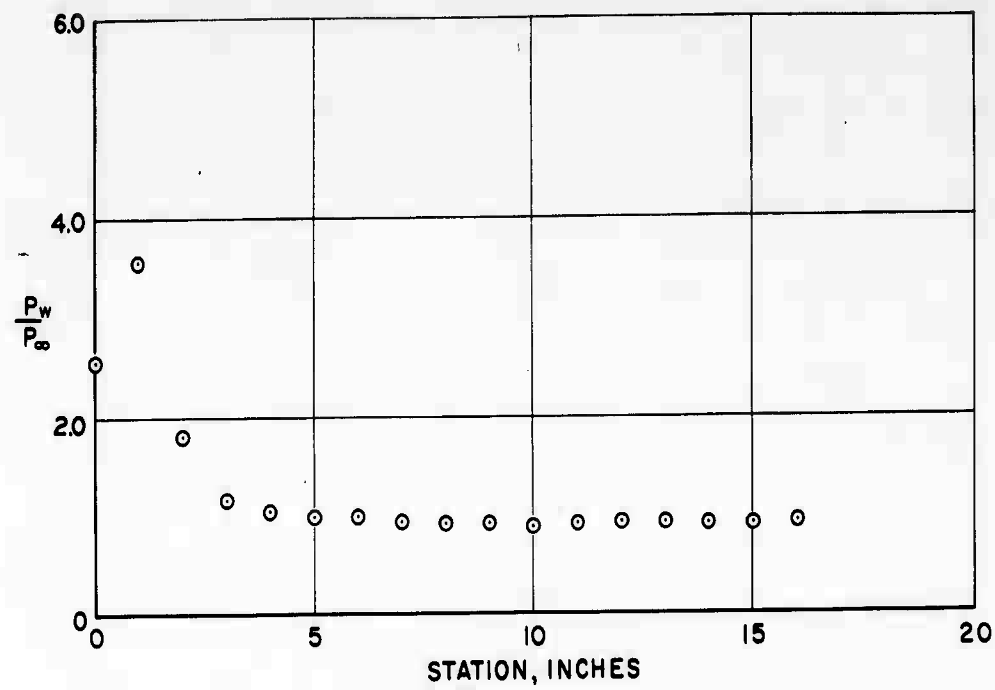


(a) Blunt center section, $M_\infty = 1.61$.

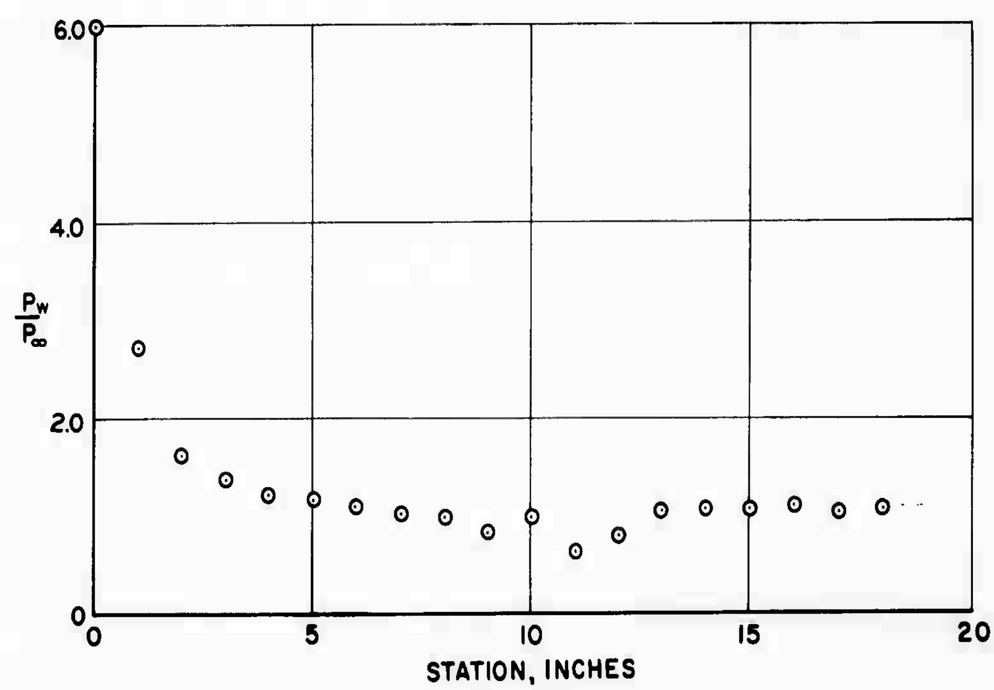


(b) Blunt center section, $M_\infty = 2.58$.

Figure 23.- Measured static-pressure distribution on the body surface and at the edge of boundary layer.

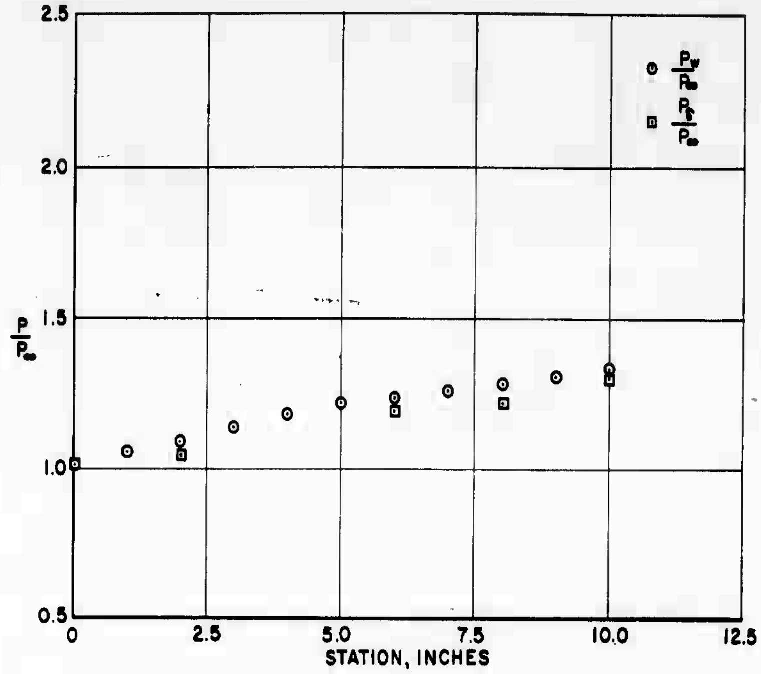


(c) Blunt center section, $M_\infty = 3.30$.

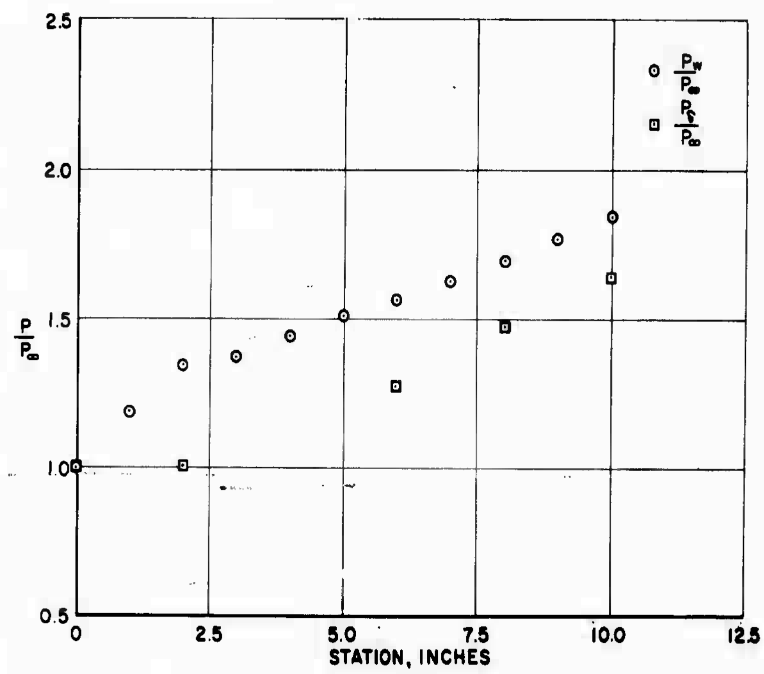


(d) Blunt center section, $M_\infty = 4.50$.

Figure 23.- Continued.

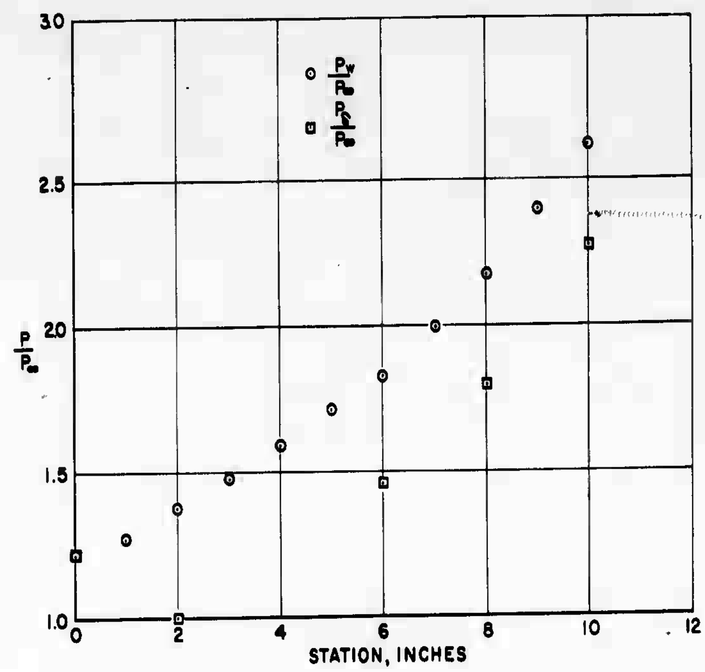


(e) Concave center section, $M_\infty = 1.61$.

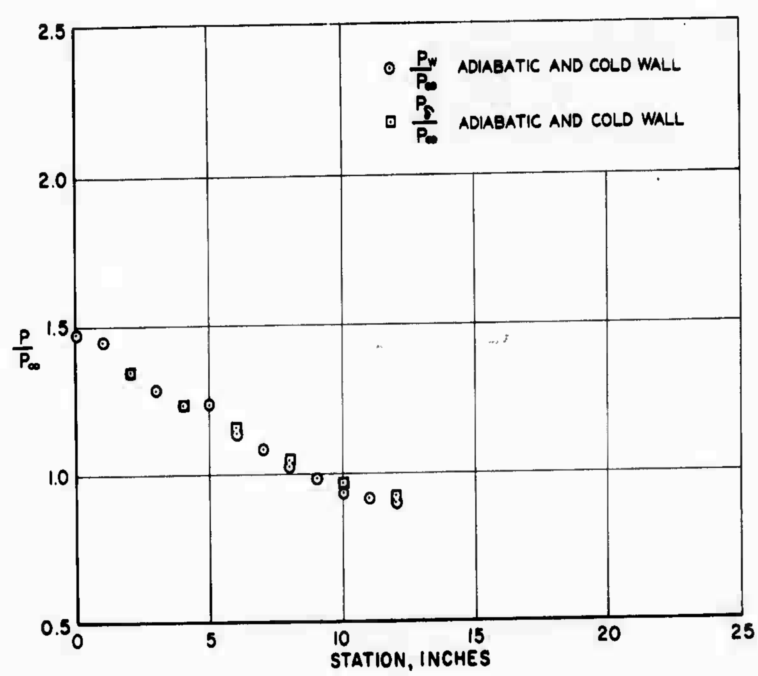


(f) Concave center section, $M_\infty = 3.30$.

Figure 23.- Continued.

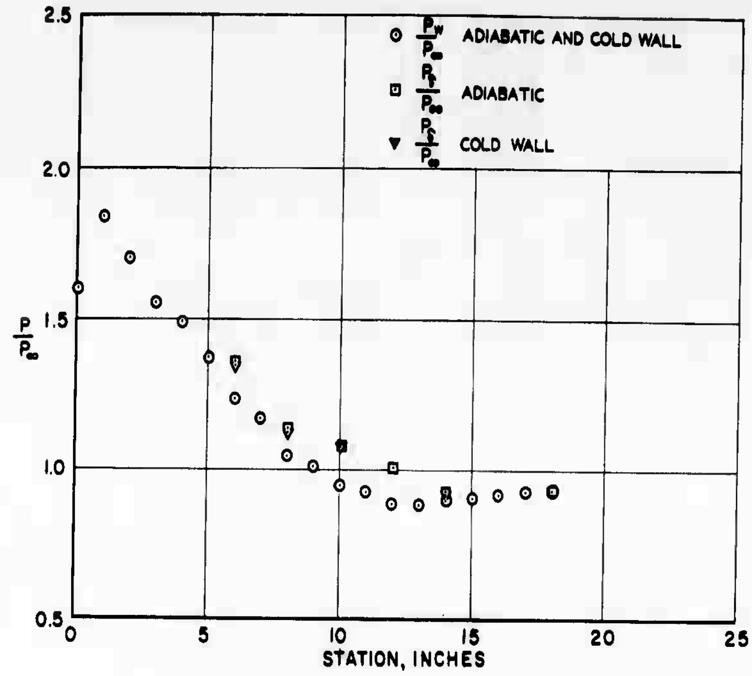


(g) Concave center section, $M_\infty = 4.50$.

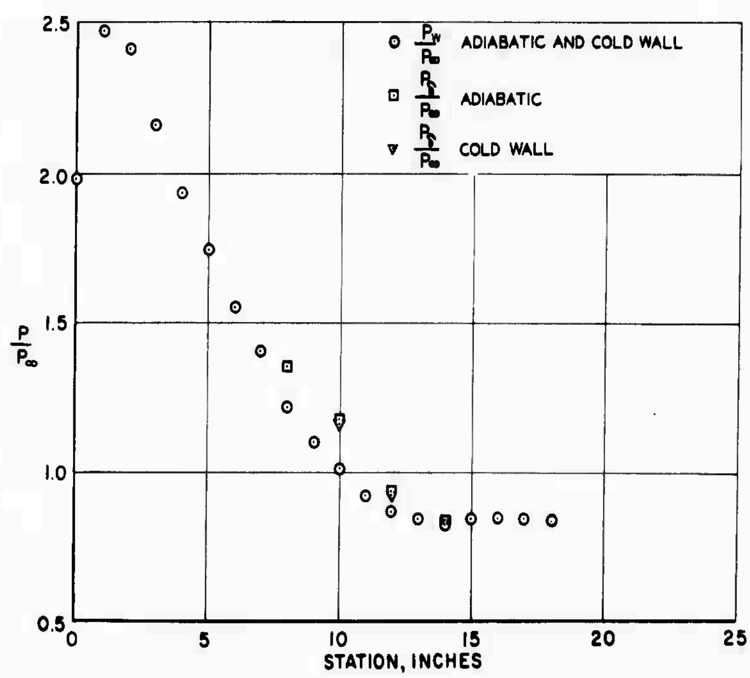


(h) Convex center section, M_∞ 1.61.

Figure 23.- Continued.

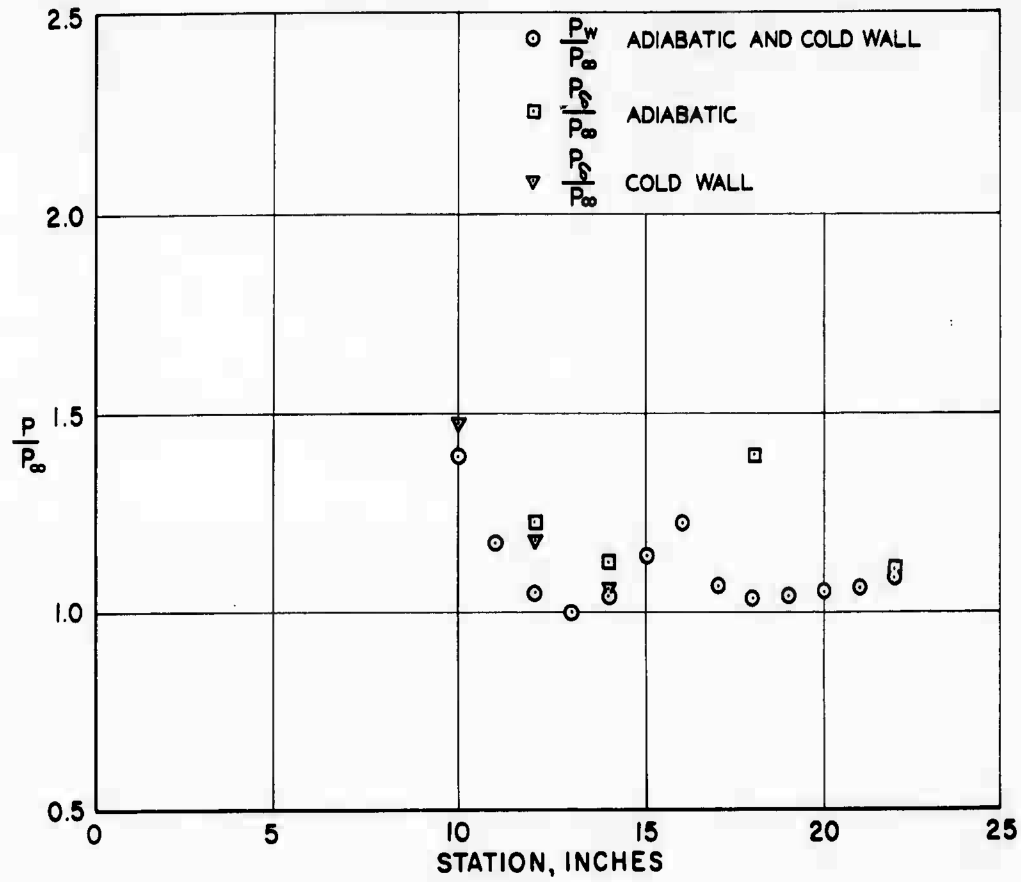


(i) Convex center section, M_∞ 2.58.



(j) Convex center section, M_∞ 3.30.

Figure 23.- Continued.



(k) Convex center section, M_∞ 4.50.

Figure 23.- Concluded.

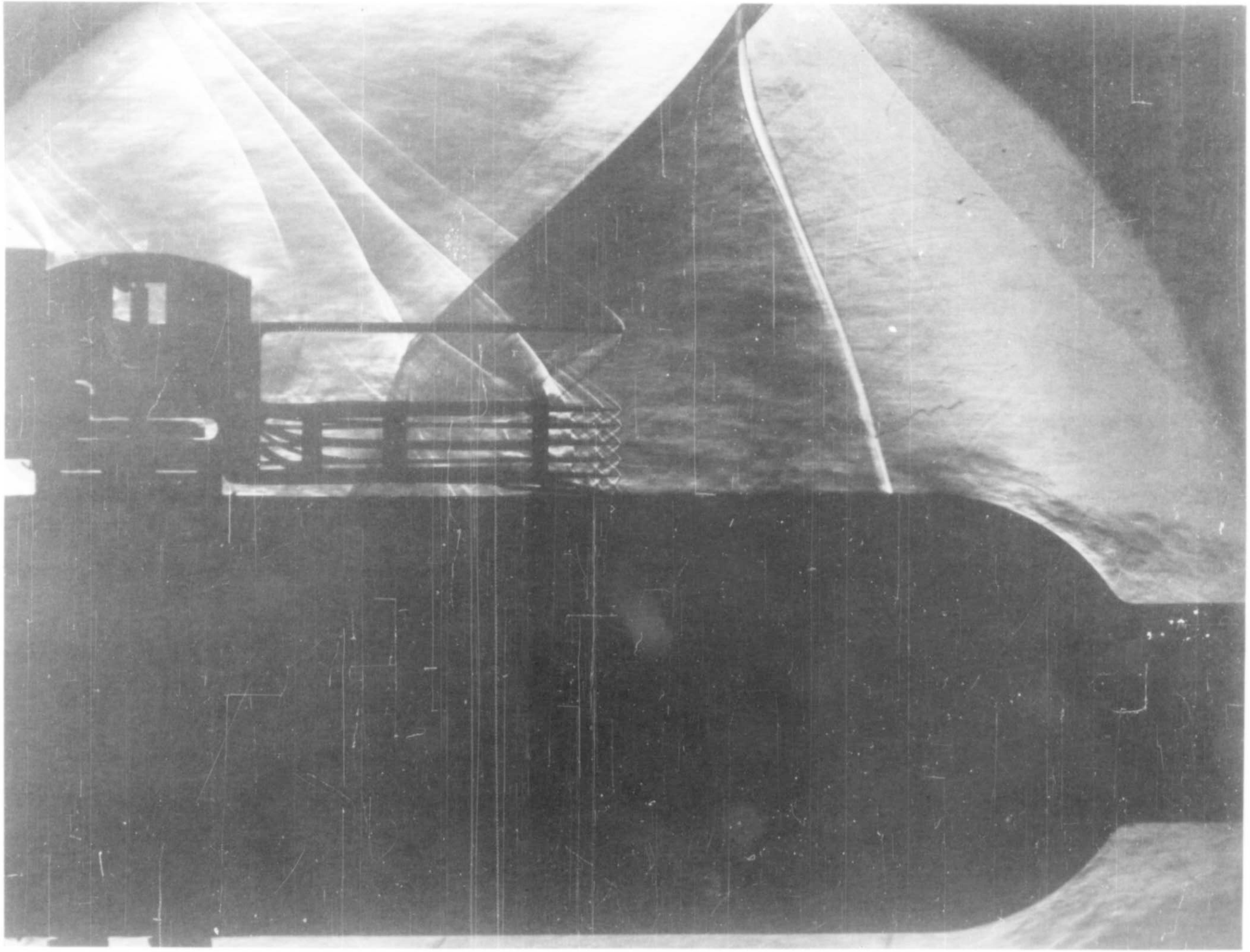


Figure 24. - Schlieren photograph of flow over blunt center section at M_∞ = 1.61. Rake mounted at station 6. Shock that appears to be impinging on model at about station 3 is actually shock impinging on tunnel window.

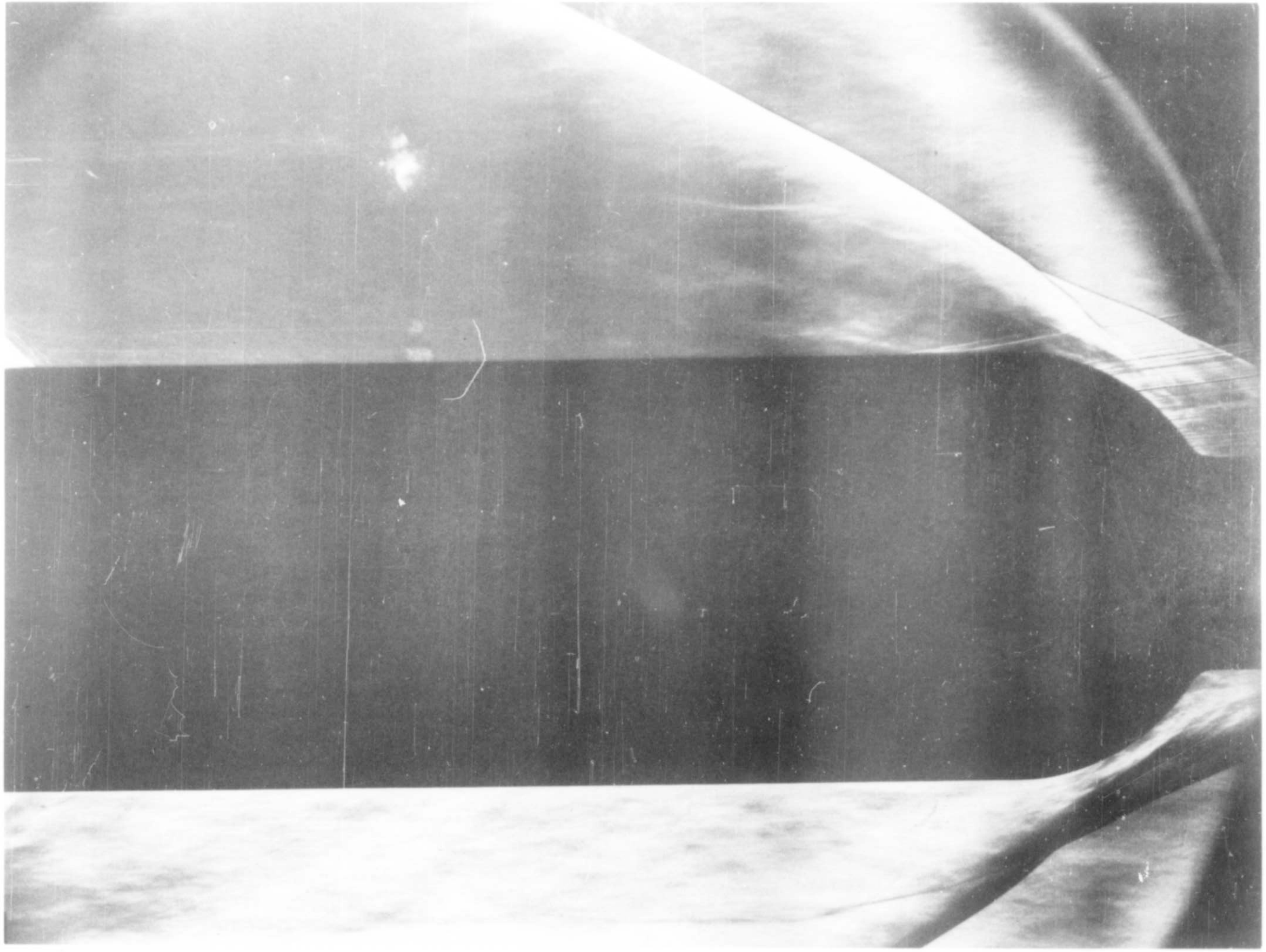


Figure 25. - Schlieren photograph of flow over blunt center section at $M_\infty = 3.3$.

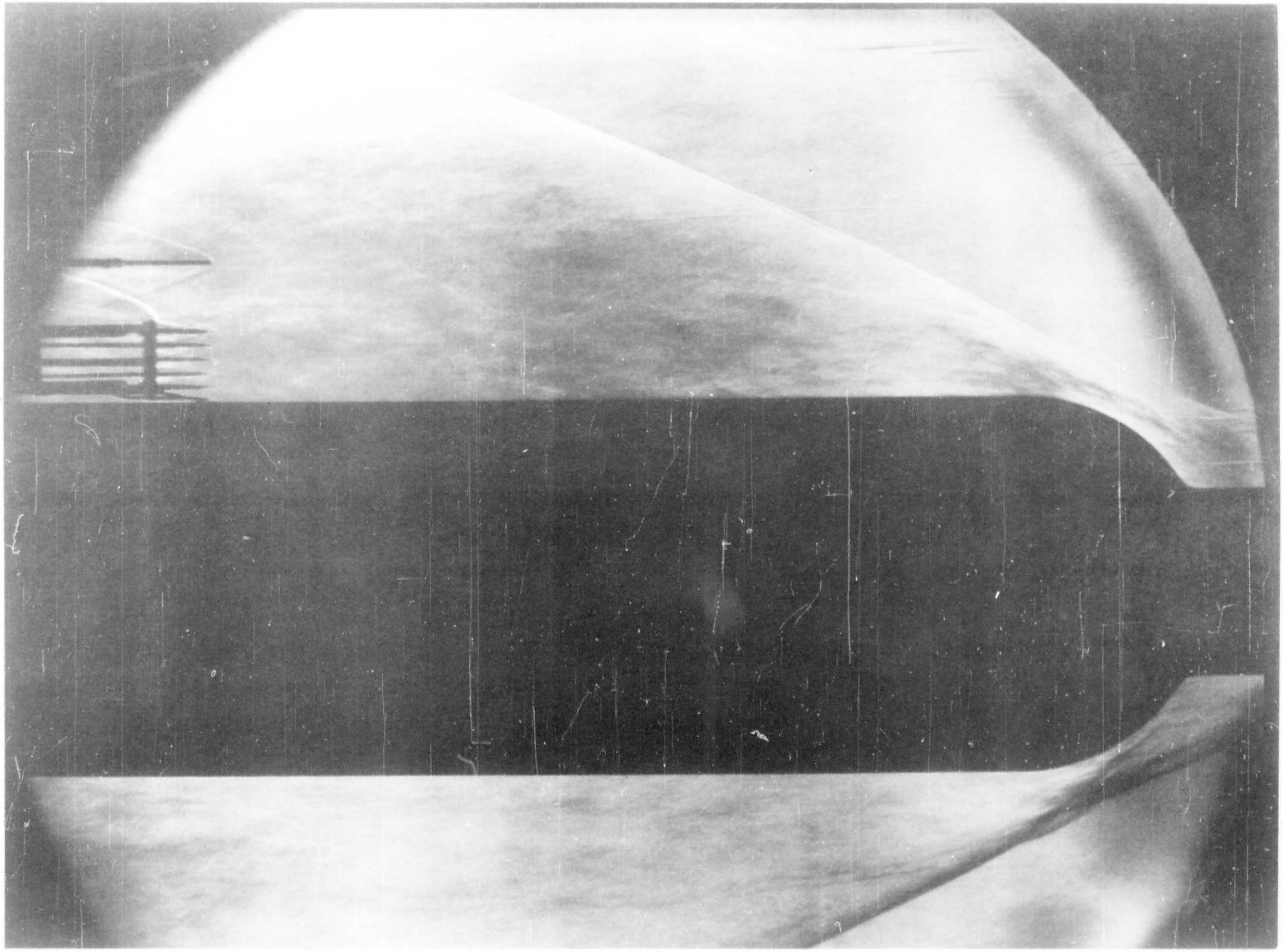


Figure 26. - Schlieren photograph of flow over blunt center section at M_∞ 4.5. Rake mounted at station 14.

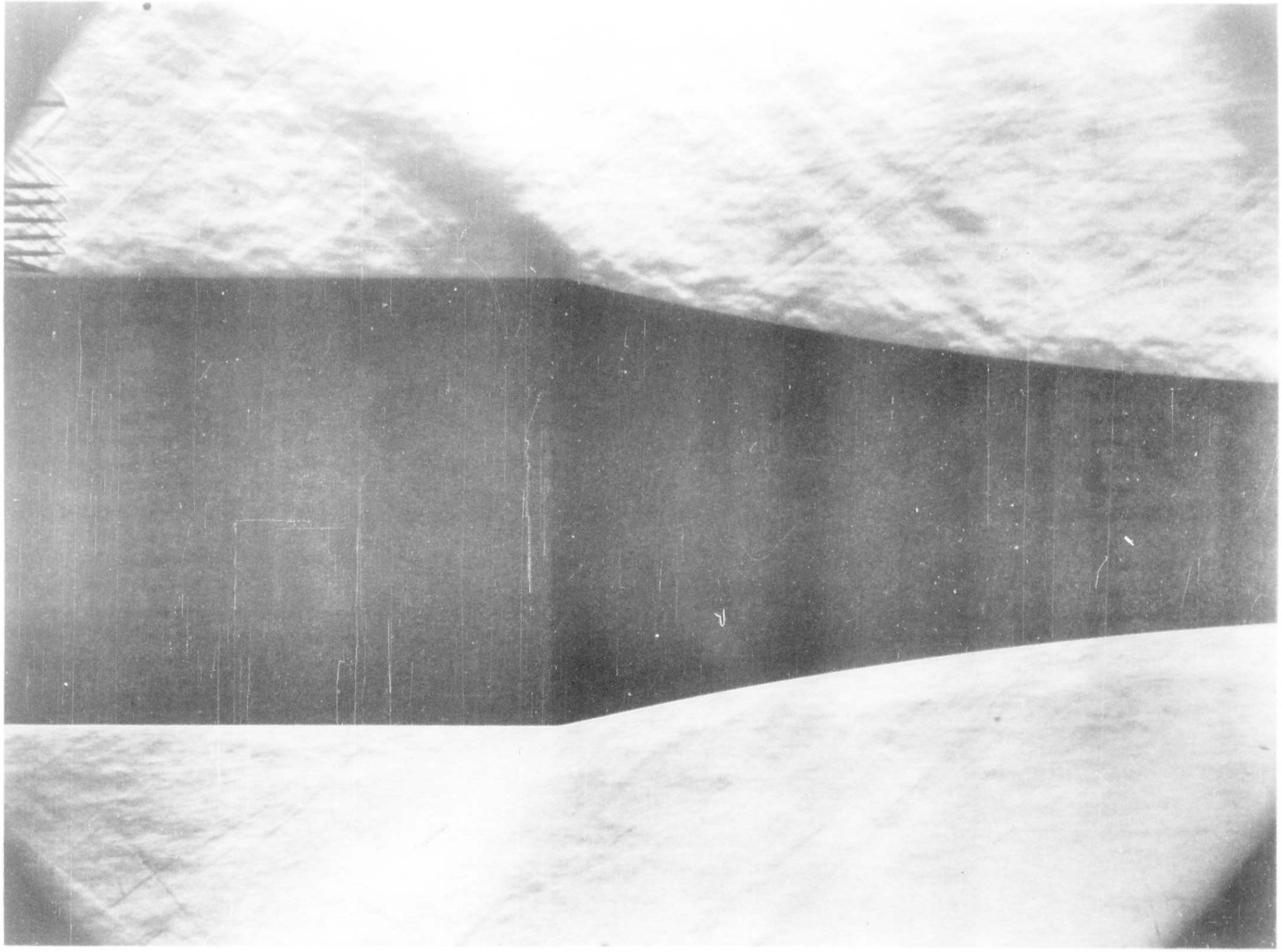


Figure 27. - Schlieren photograph of flow over concave center section at $M_\infty = 1.61$. Rake mounted at station 19.

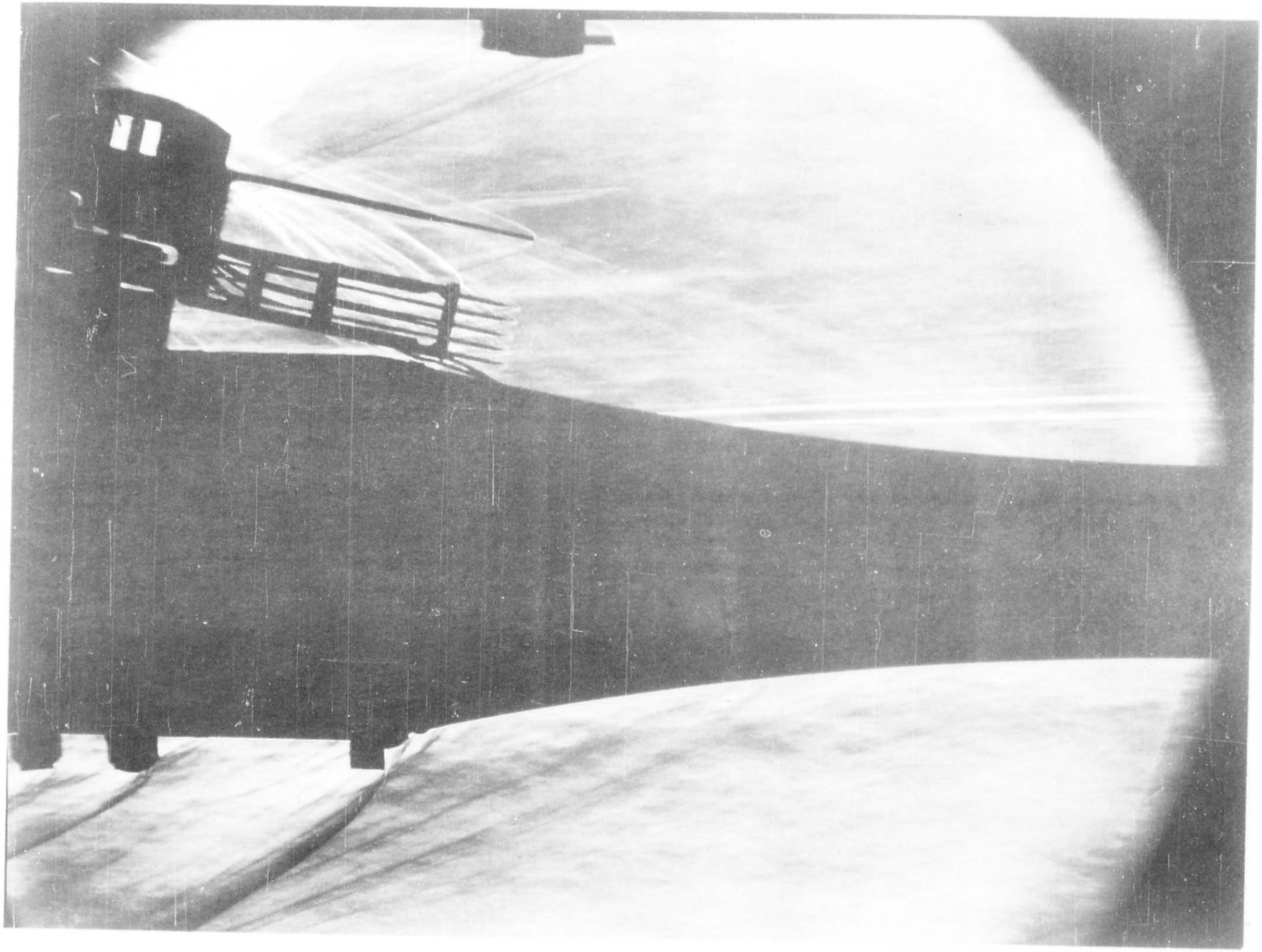


Figure 28. - Schlieren photograph of flow over concave center section at M_∞ 3.3. Rake mounted at station 10.

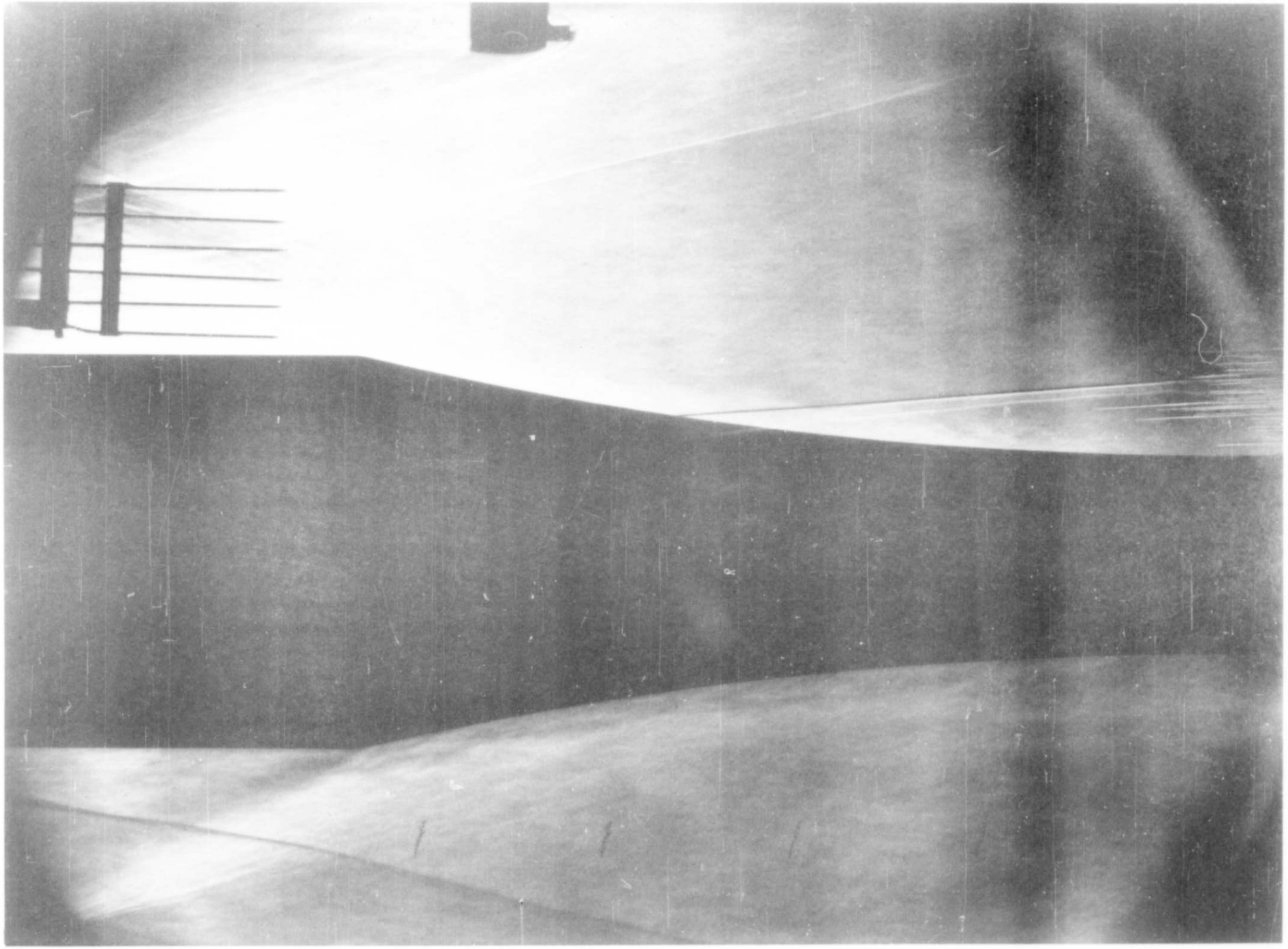


Figure 29. - Schlieren photograph of flow over concave center section at $M_\infty = 4.5$. Static-pressure rake mounted at station 13.

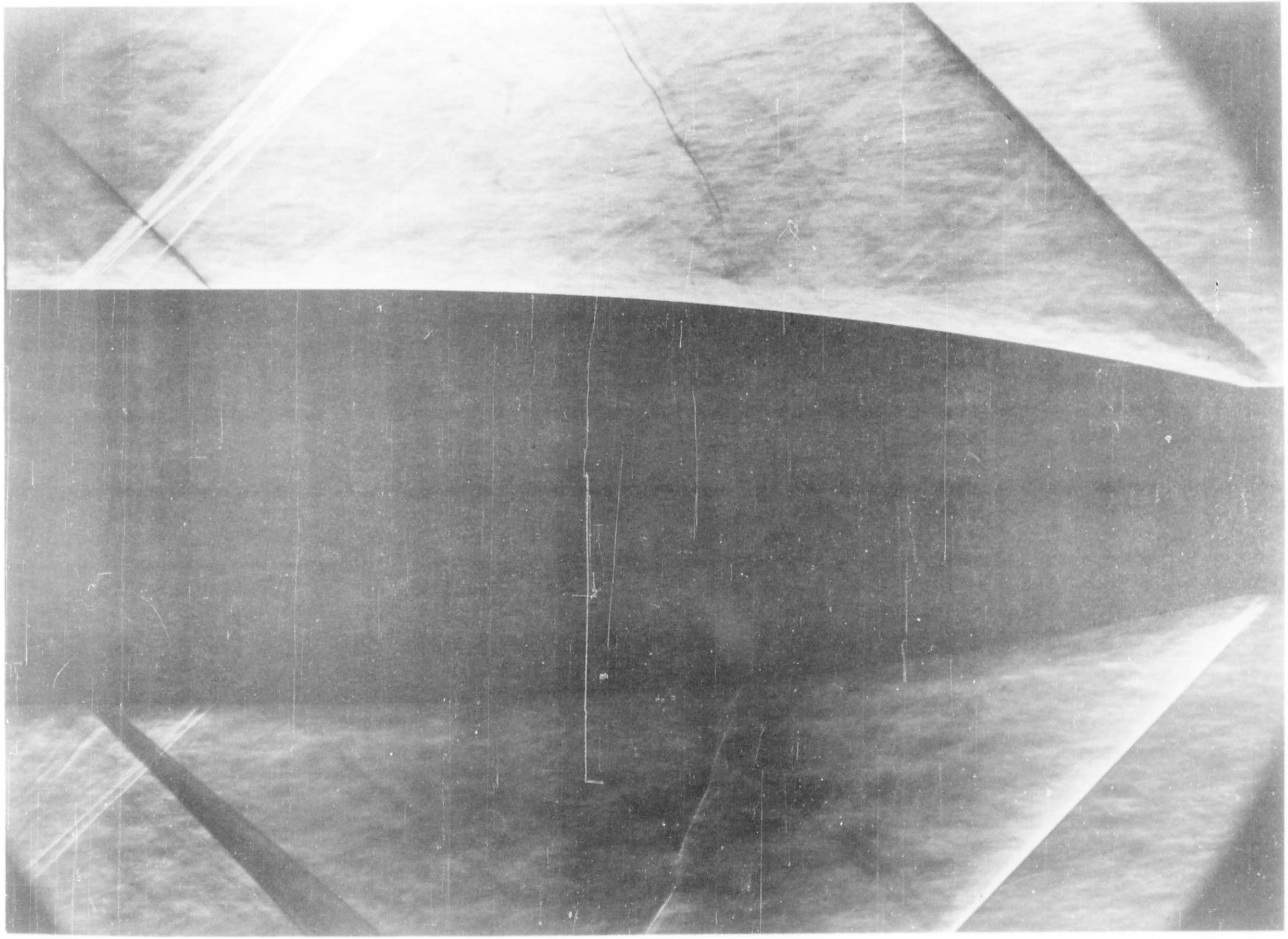


Figure 30. - Schlieren photograph of flow over convex center section at $M_\infty = 1.61$.

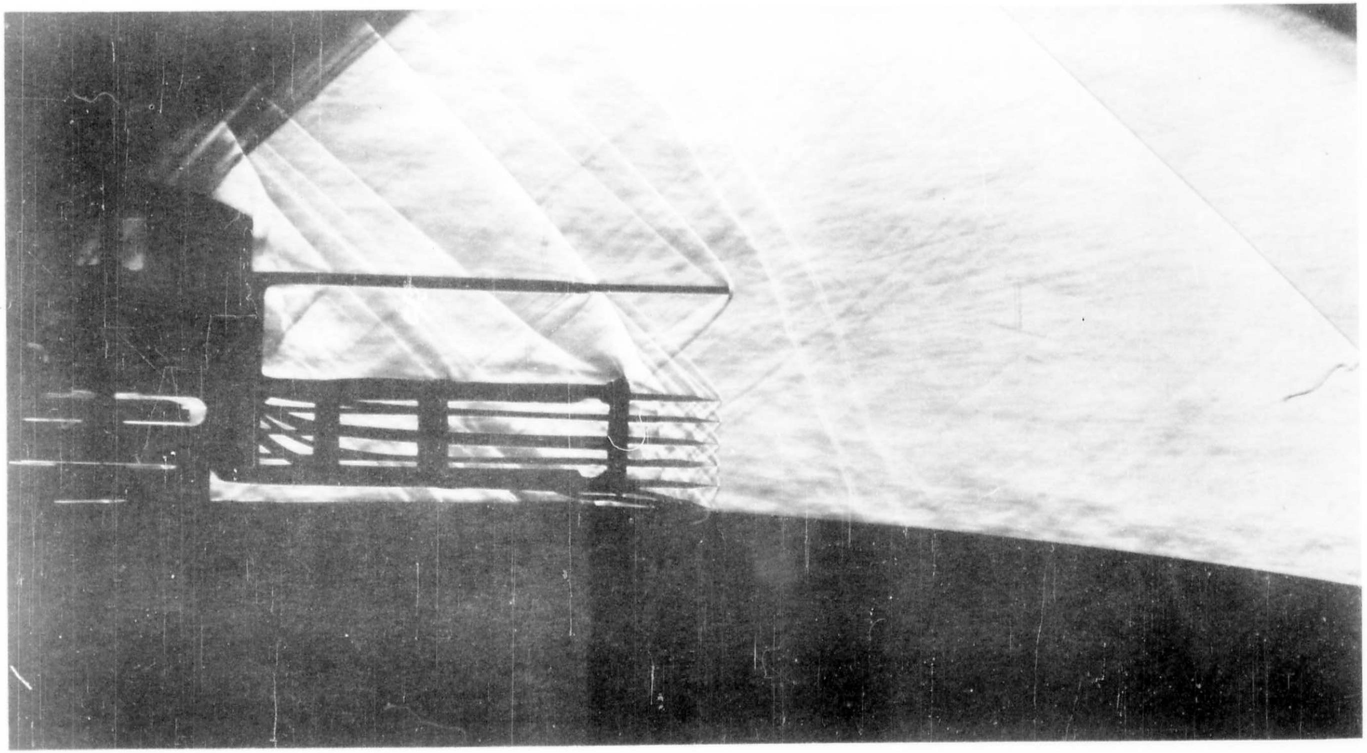


Figure 31. - Schlieren photograph of shocks formed about the rake of total-pressure and temperature probes. $M_\infty = 1.61$. Rake mounted at station 8.

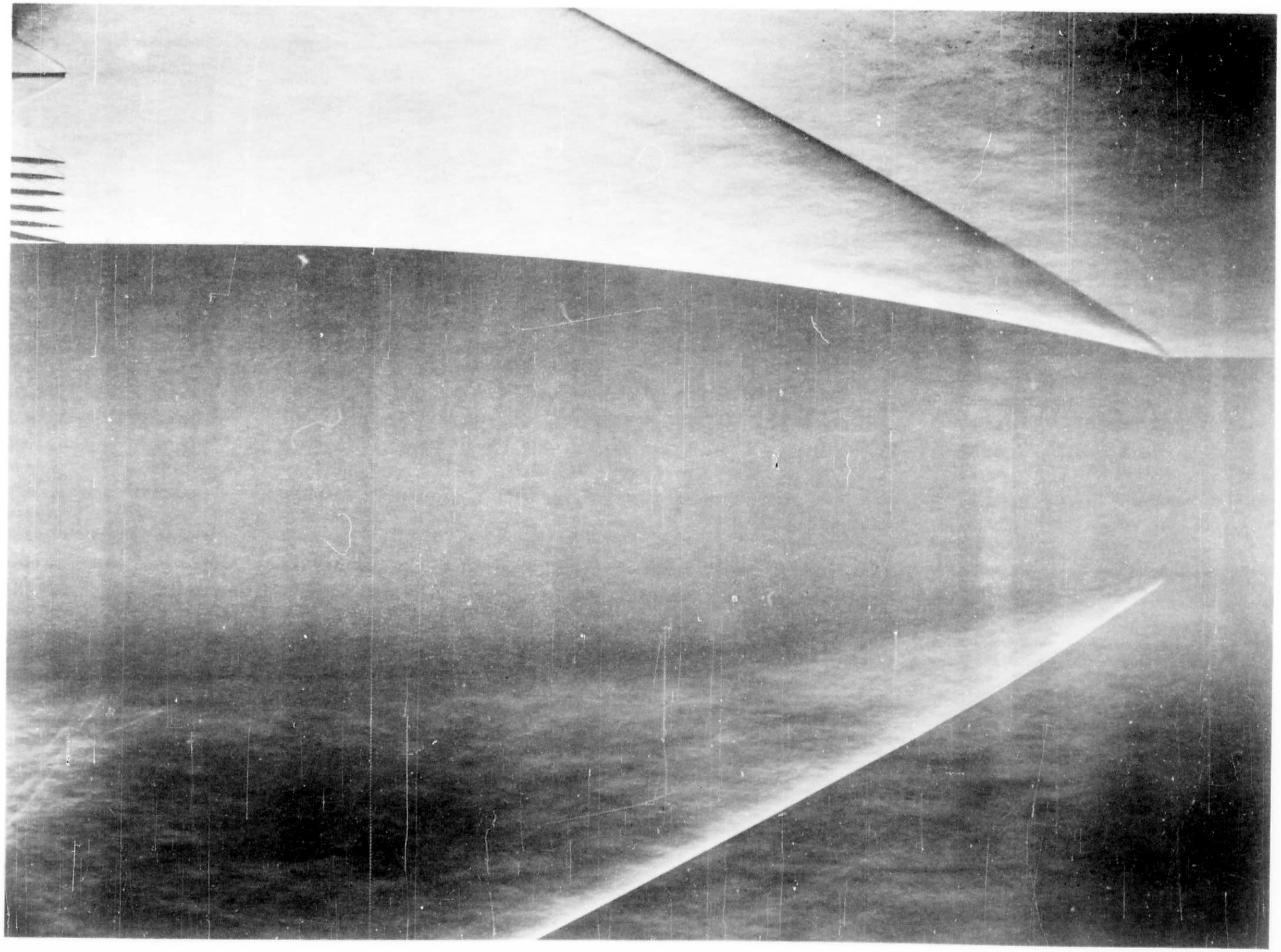


Figure 32. - Schlieren photograph of flow over convex center section at $M_\infty = 2.58$. Rake mounted at station 14.

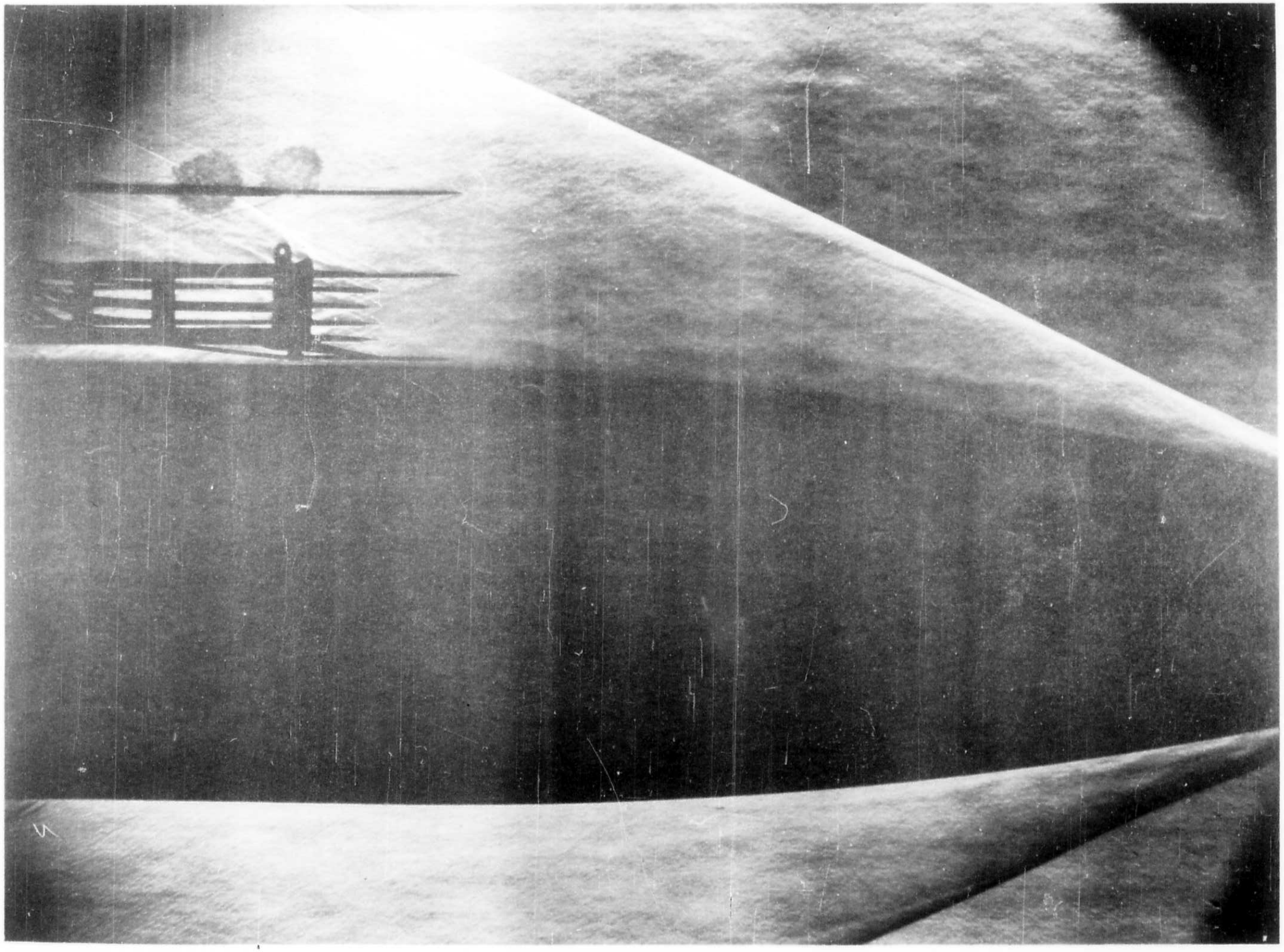


Figure 33. - Schlieren photograph of flow over convex center section at $M_{\infty} = 3.3$. Static-pressure probes attached to rake to obtain profile at station 12.

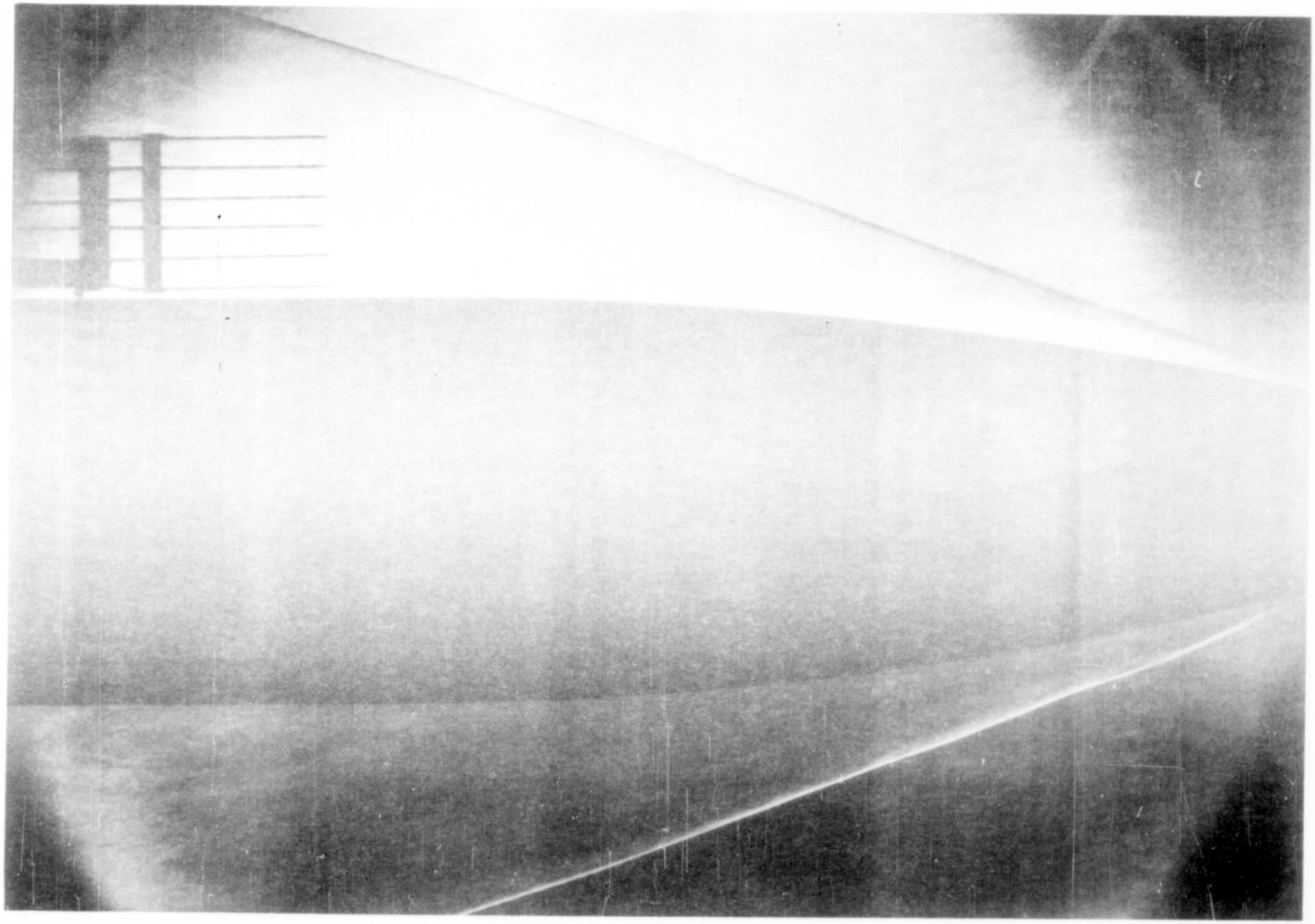
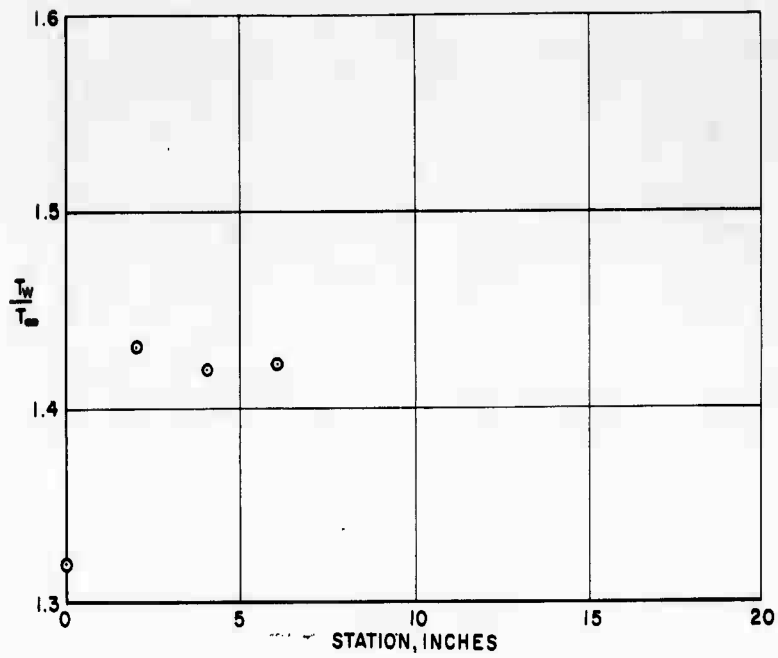
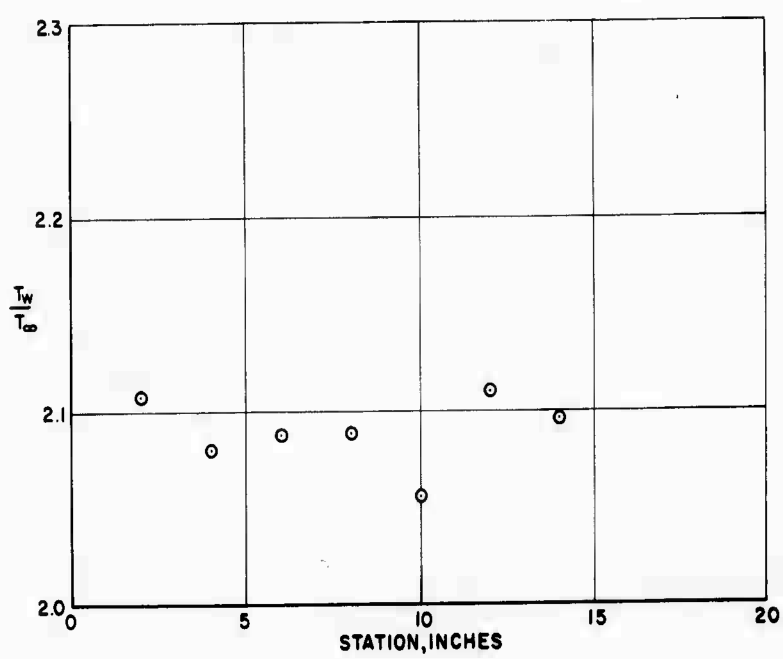


Figure 34. - Schlieren photograph of flow over convex center section at $M_\infty = 4.5$. Static-pressure rake mounted at station 14.

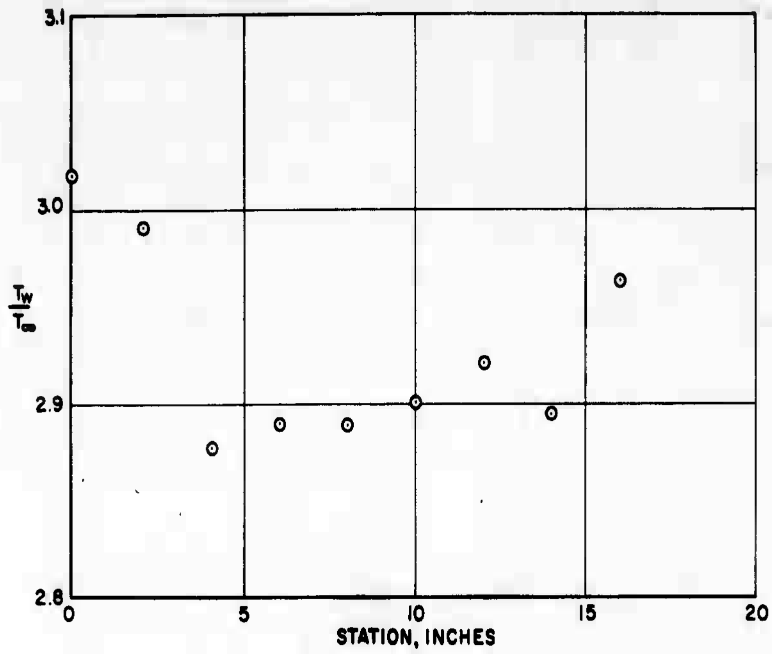


(a) Blunt center section, $M_\infty = 1.61$.

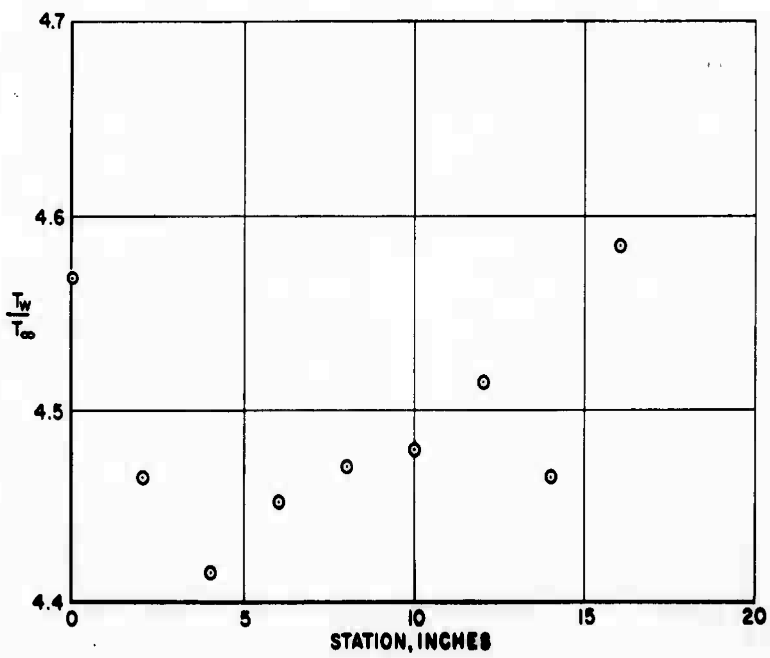


(b) Blunt center section, $M_\infty = 2.58$.

Figure 35. - Measured surface temperature distribution along the body surface.

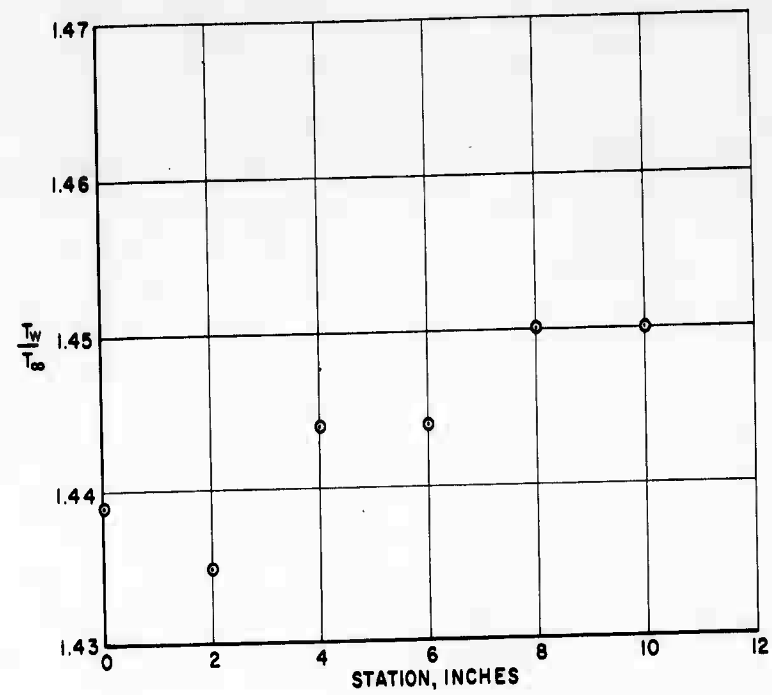


(c) Blunt center section, $M_\infty = 3.30$.

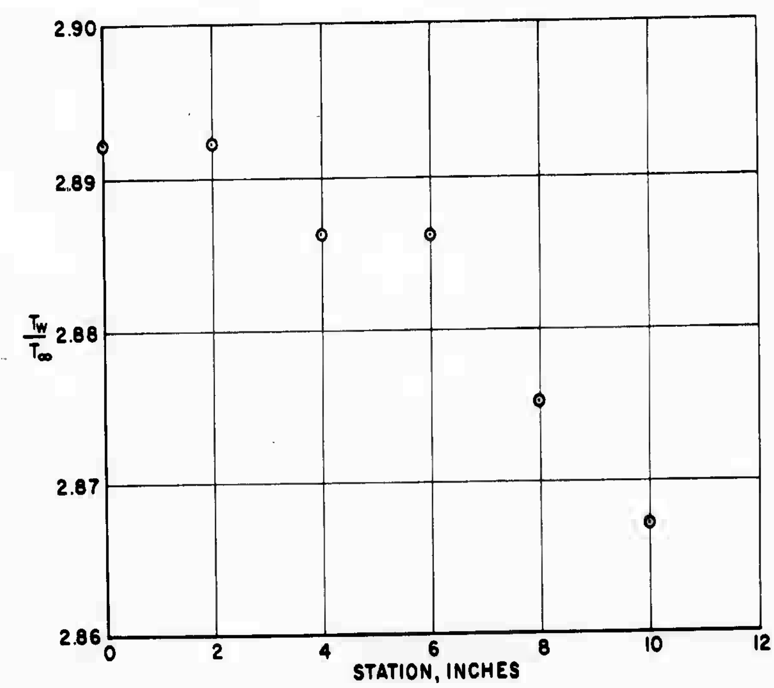


(d) Blunt center section, $M_\infty = 4.50$.

Figure 35.- Continued.

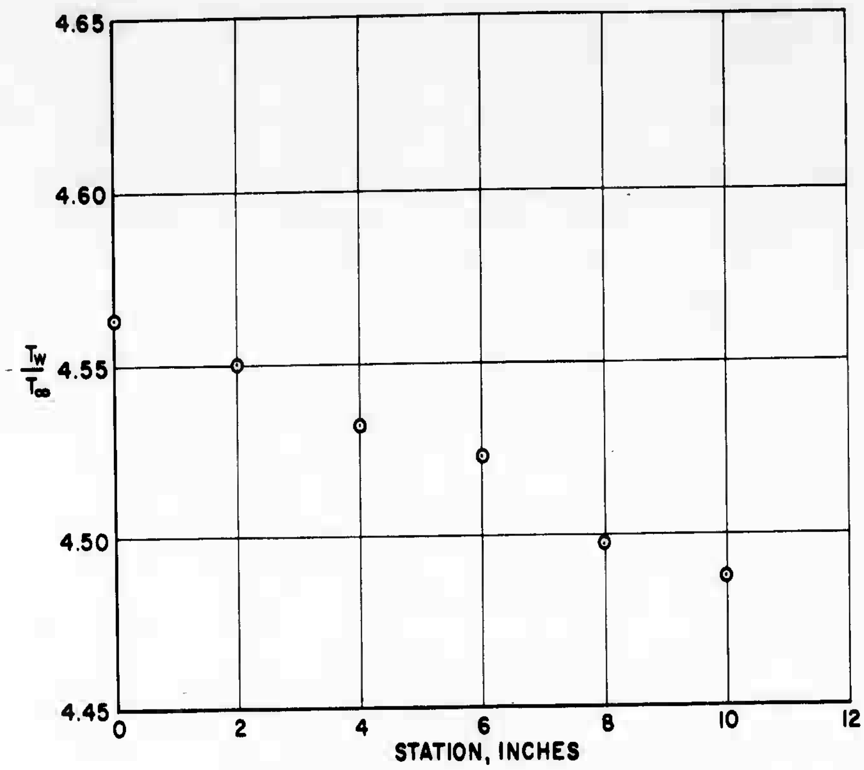


(e) Concave center section, $M_\infty = 1.61$.

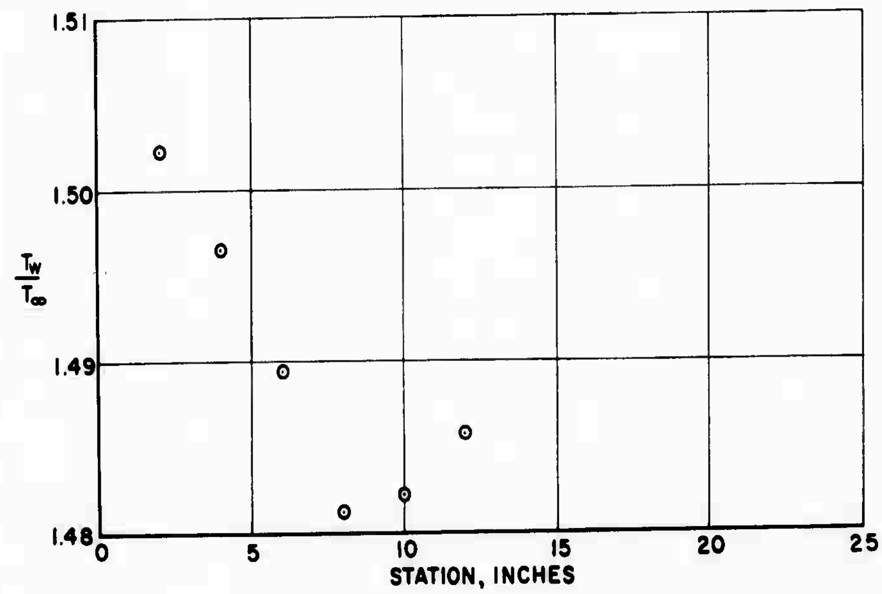


(f) Concave center section, $M_\infty = 3.30$.

Figure 35.- Continued.

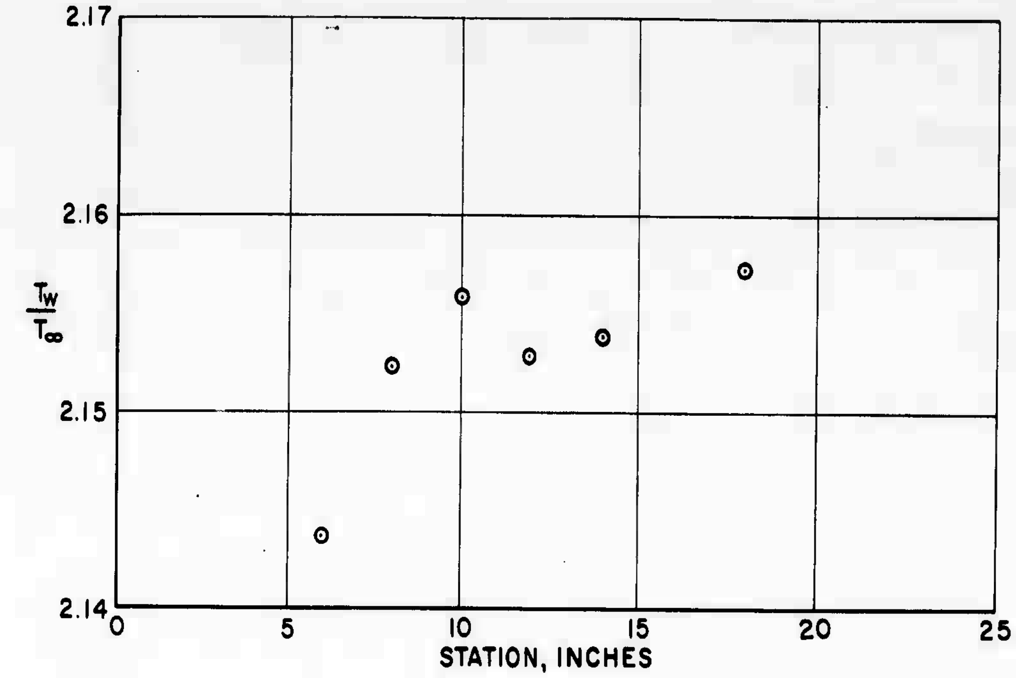


(g) Concave center section, $M_\infty = 4.50$.

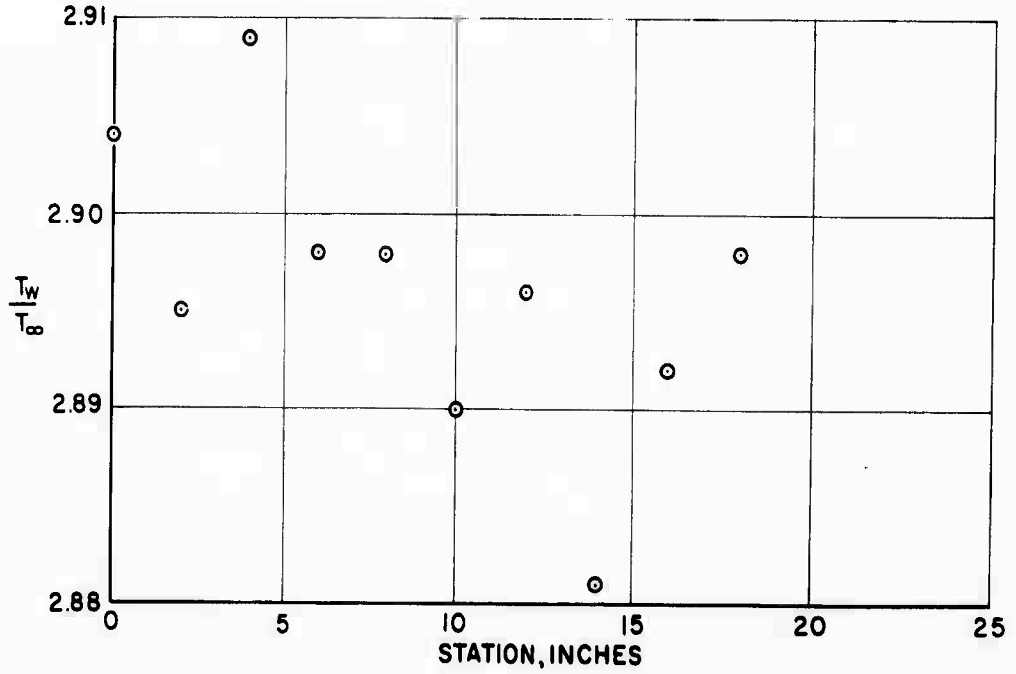


(h) Convex center section with a nearly adiabatic wall, $M_\infty = 1.61$.

Figure 35.- Continued.

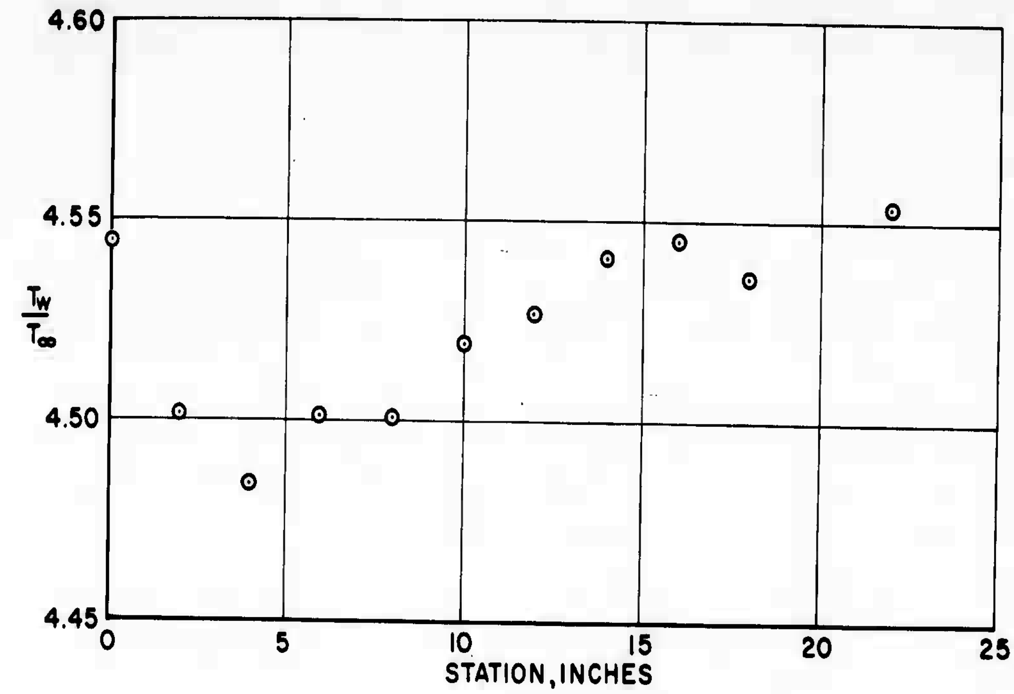


(i) Convex center section with a nearly adiabatic wall, $M_\infty = 2.58$.

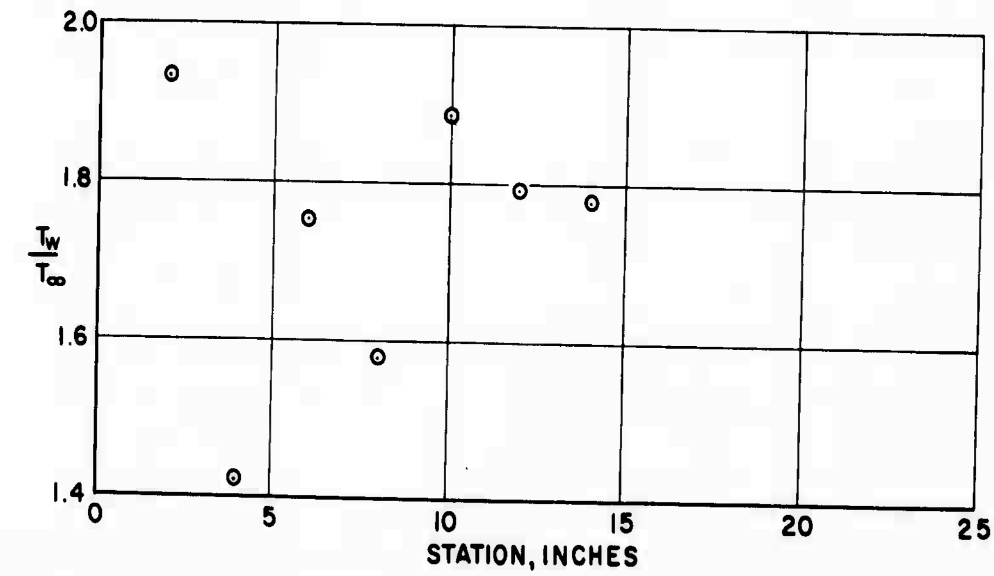


(j) Convex center section with a nearly adiabatic wall, $M_\infty = 3.30$.

Figure 35.- Continued.

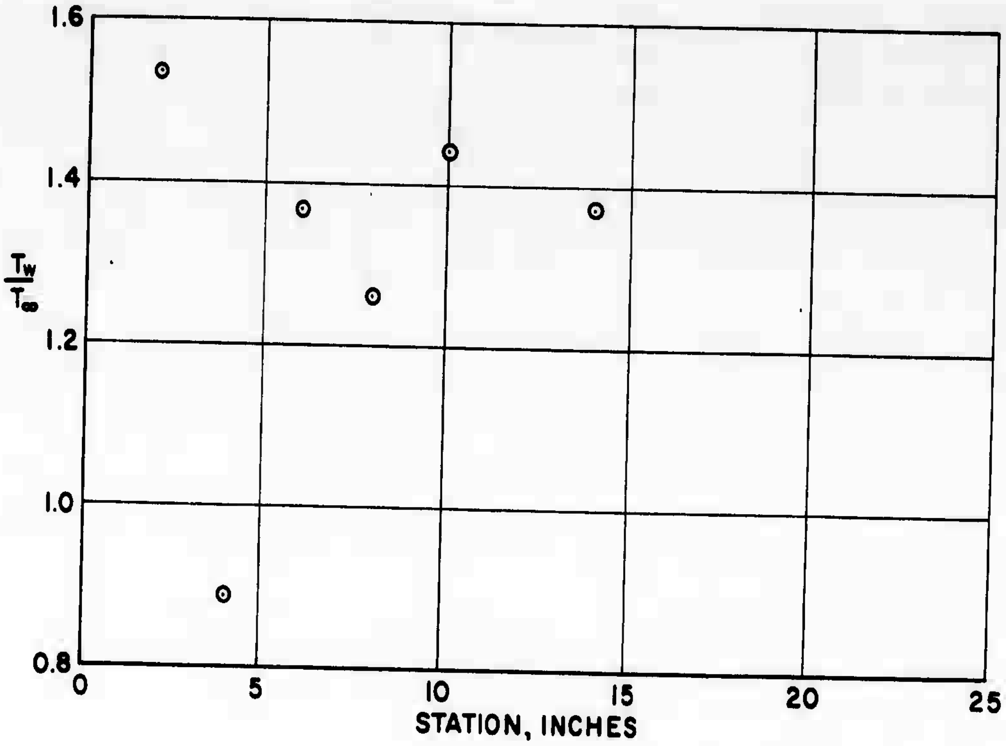


(k) Convex center section with a nearly adiabatic wall, $M_\infty = 4.50$.

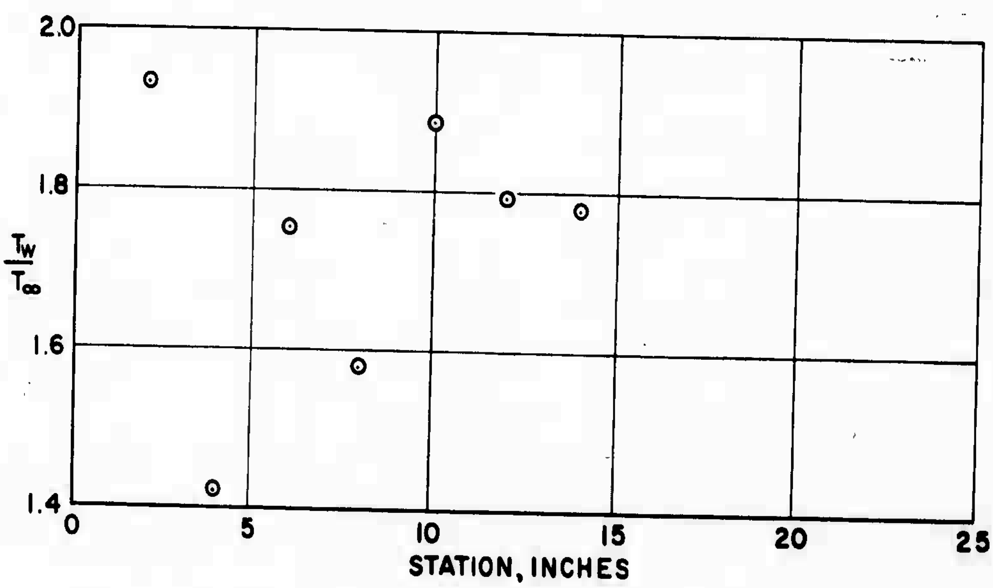


(l) Convex center section with a cooled wall, $M_\infty = 1.61$.

Figure 35.- Continued.

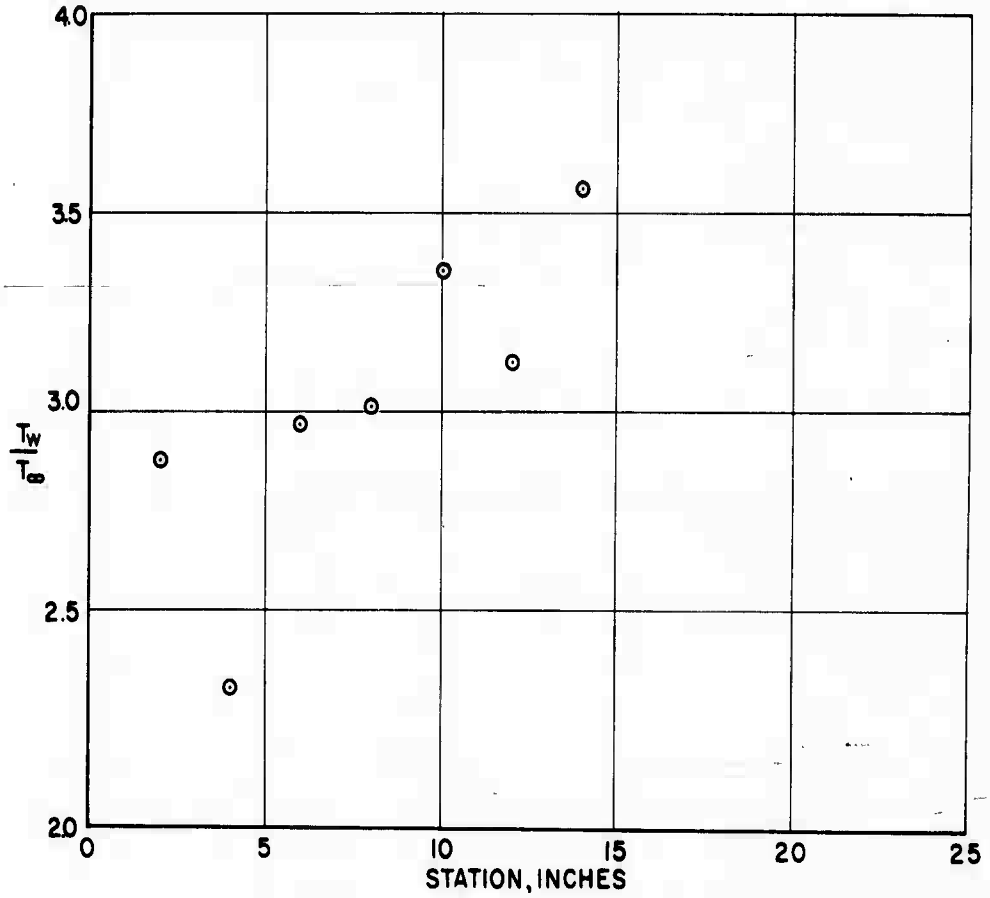


(m) Convex center section with a cooled wall, $M_\infty = 2.58$.



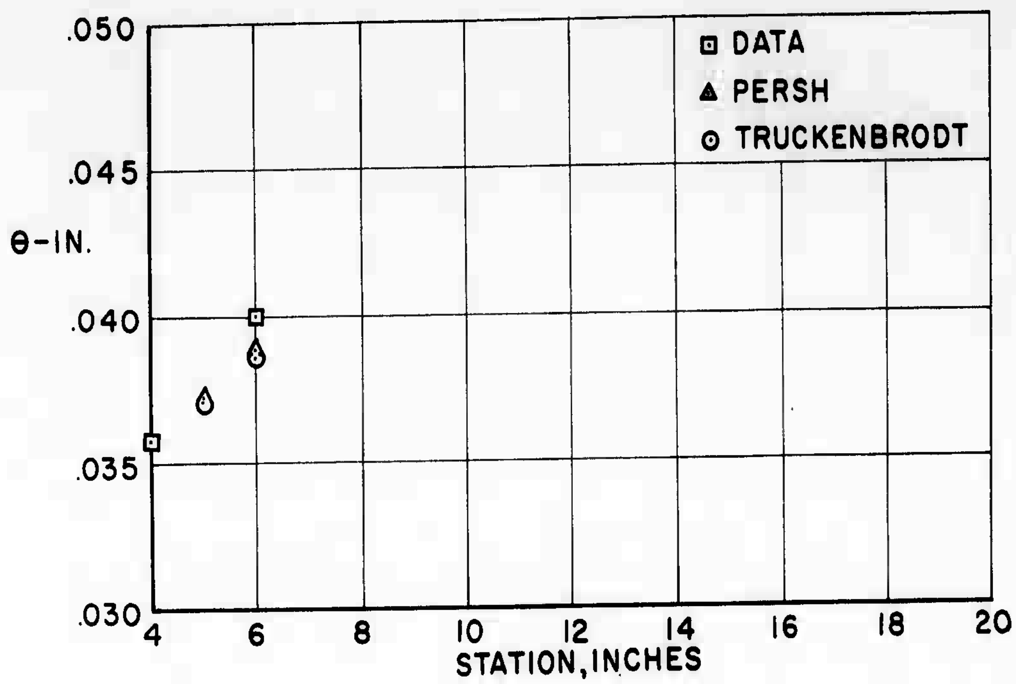
(n) Convex center section with a cooled wall, $M_\infty = 3.30$.

Figure 35.- Continued.

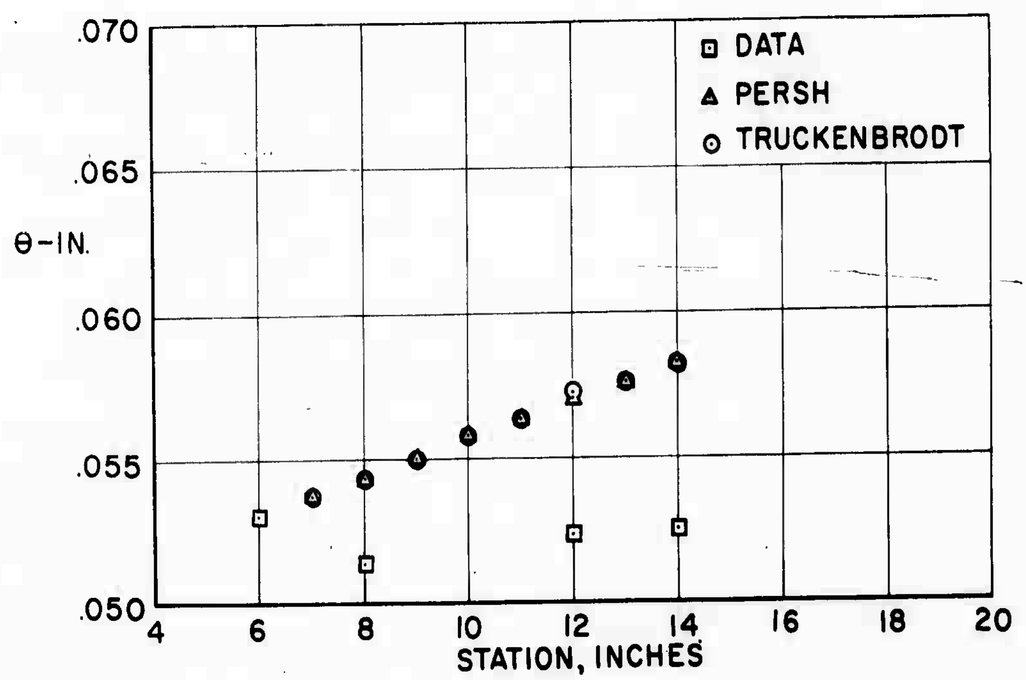


(o) Convex center section with a cooled wall, $M_\infty = 4.50$.

Figure 35.- Concluded.

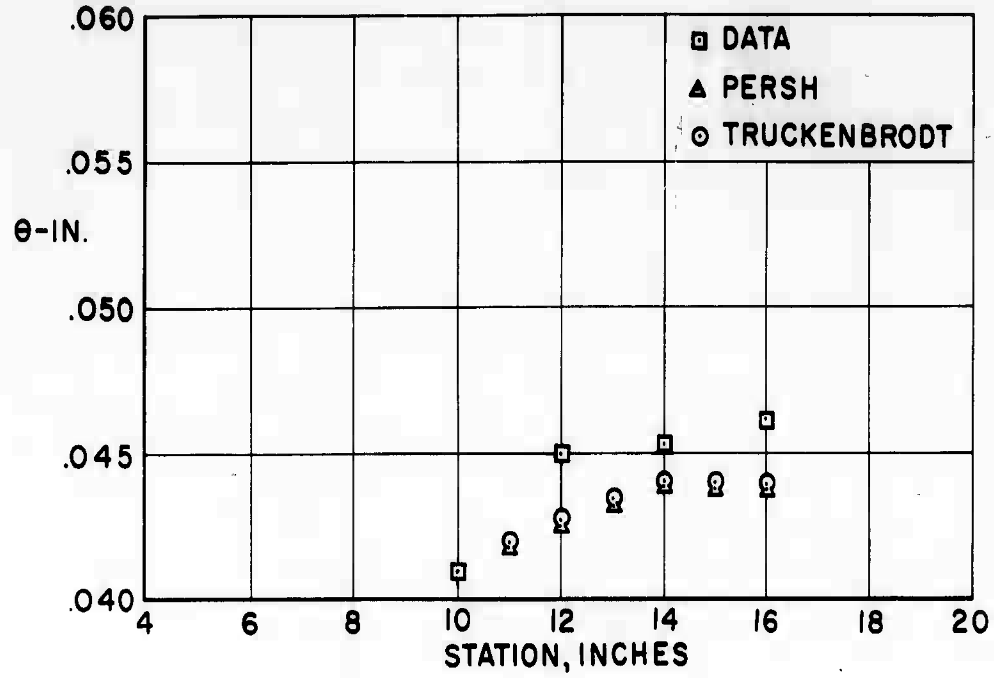


(a) Blunt center section, $M_\infty = 1.61$.

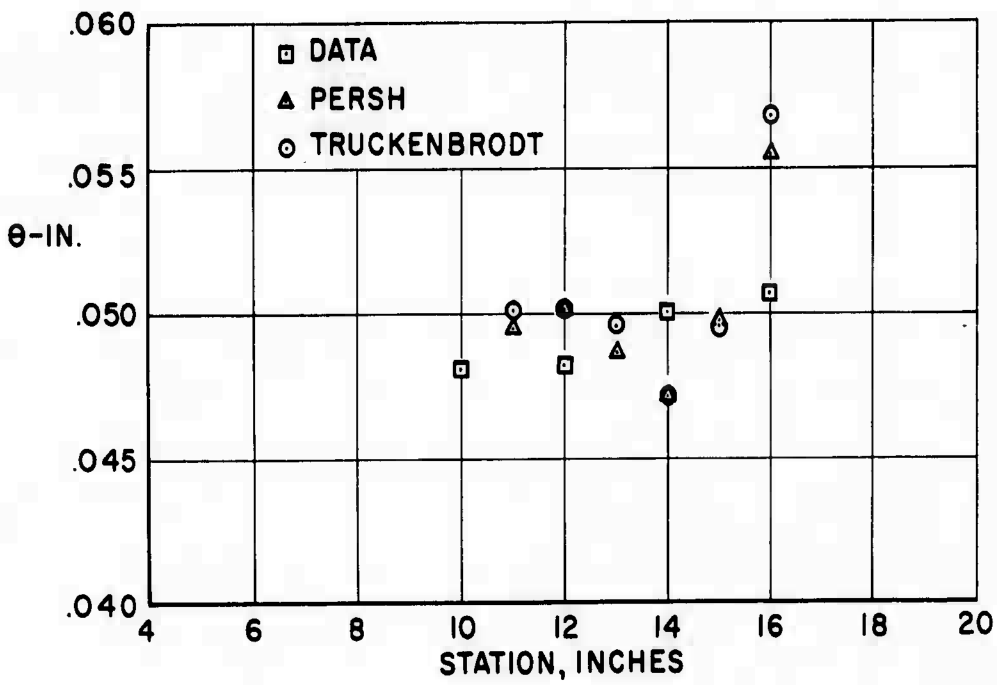


(b) Blunt center section, $M_\infty = 2.58$.

Figure 36.- Calculated and measured momentum-thickness variation along the body.

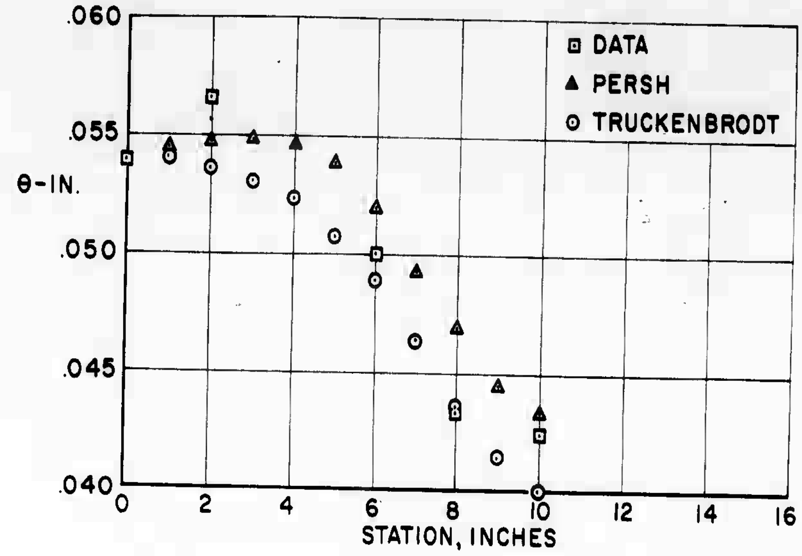


(c) Blunt center section, $M_\infty = 3.30$.

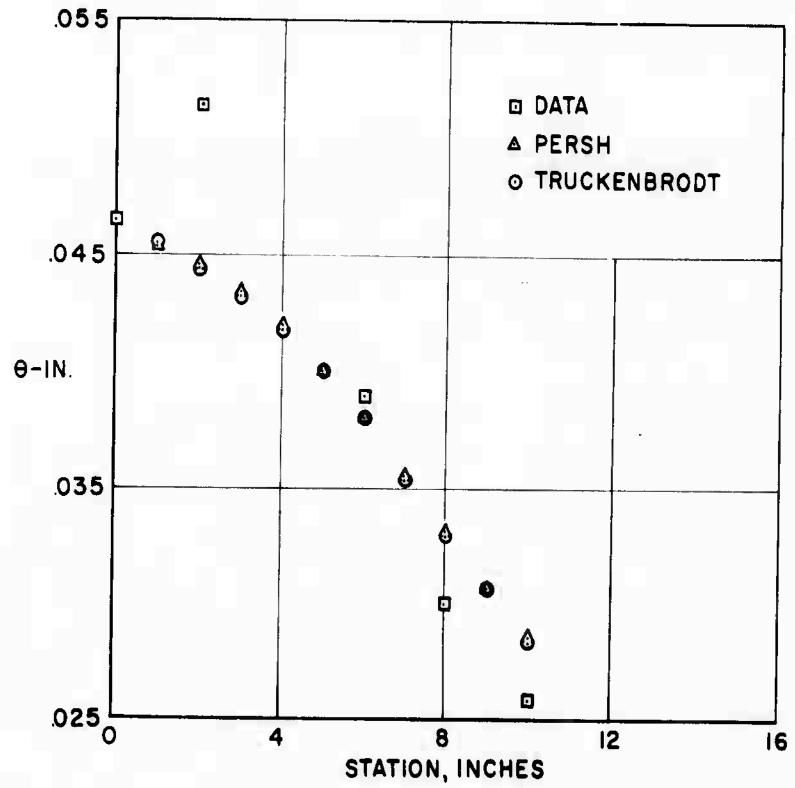


(d) Blunt center section, $M_\infty = 4.50$.

Figure 36.- Continued.

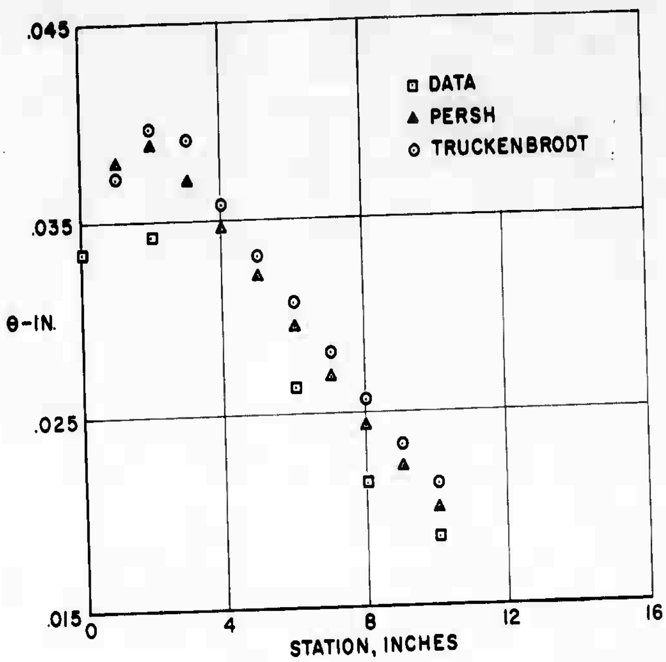


(e) Concave center section, $M_\infty = 1.61$.

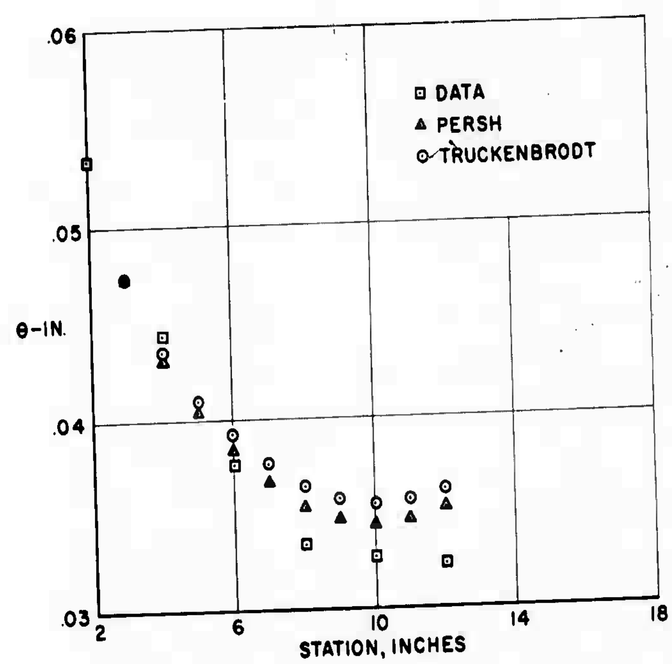


(f) Concave center section, $M_\infty = 3.30$.

Figure 36.- Continued.

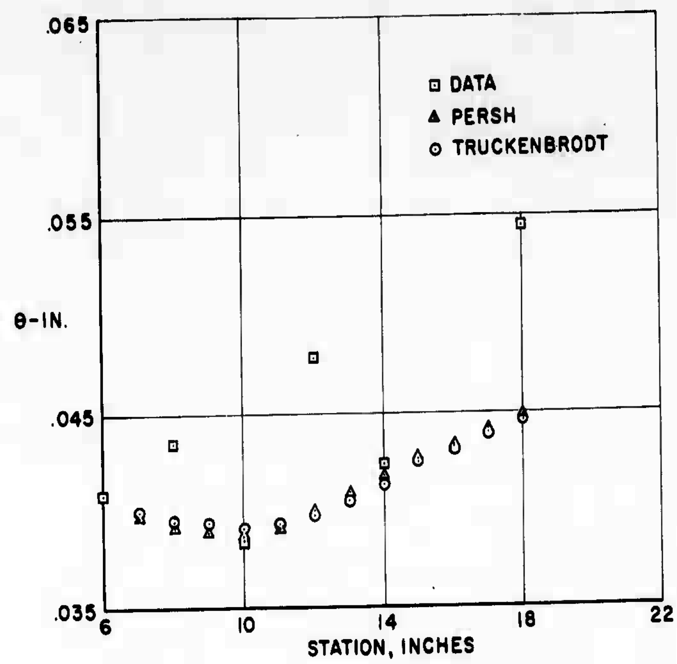


(g) Concave center section, $M_\infty = 4.50$.

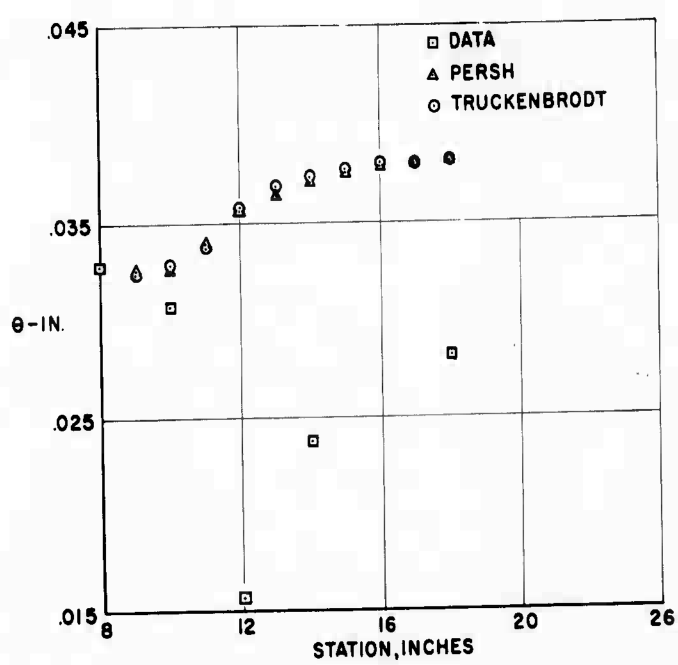


(h) Convex center section with a nearly adiabatic wall, $M_\infty = 1.61$.

Figure 36.- Continued.

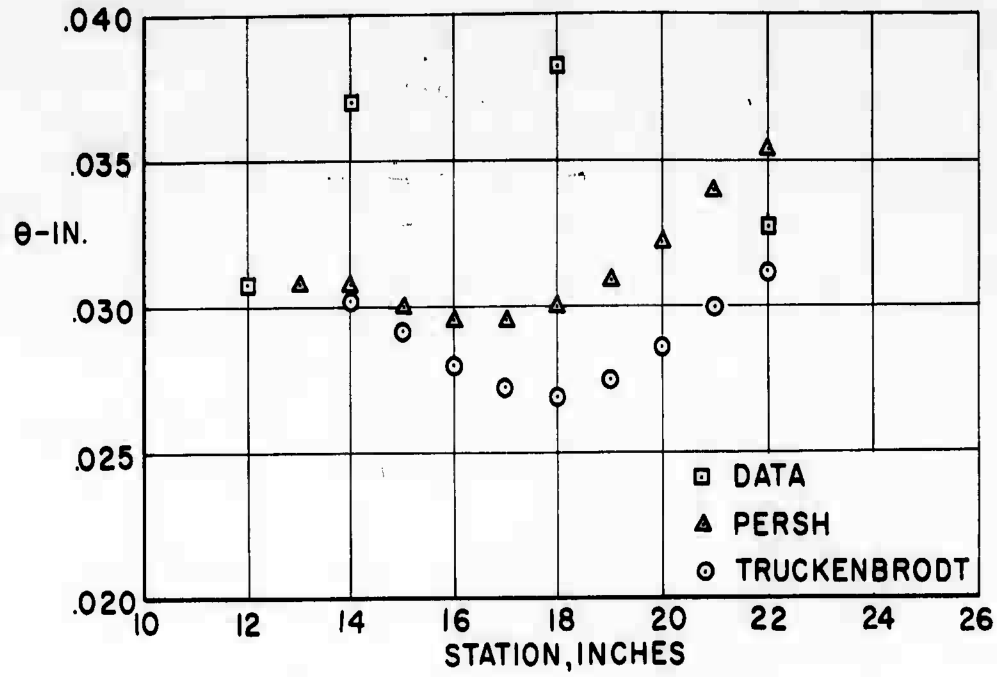


(i) Convex center section with a nearly adiabatic wall, $M_\infty = 2.58$.

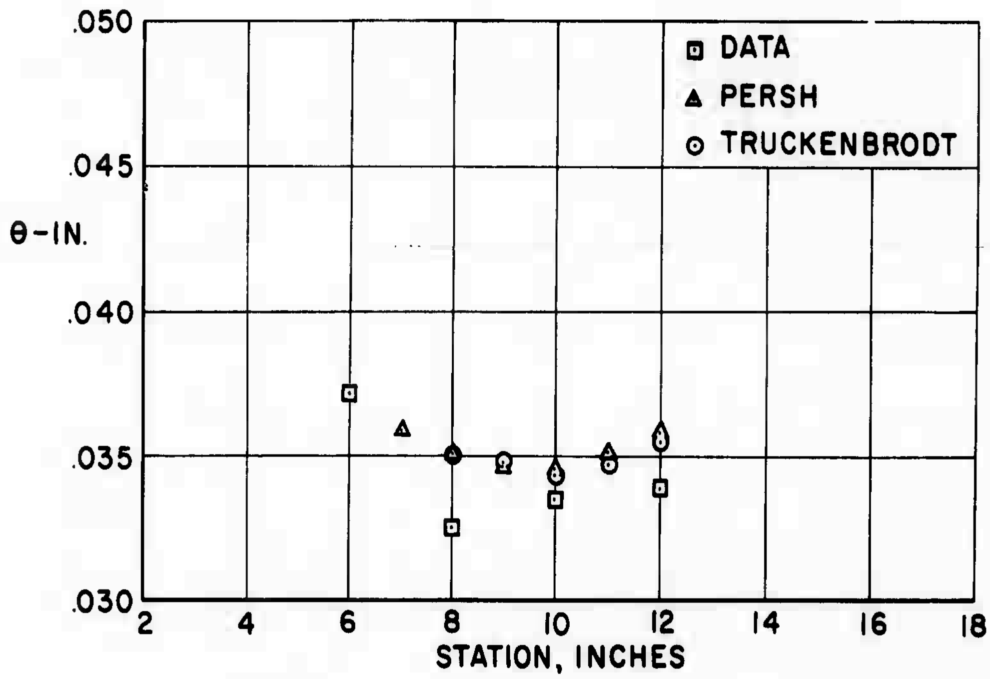


(j) Convex center section with a nearly adiabatic wall, $M_\infty = 3.30$.

Figure 36.- Continued.

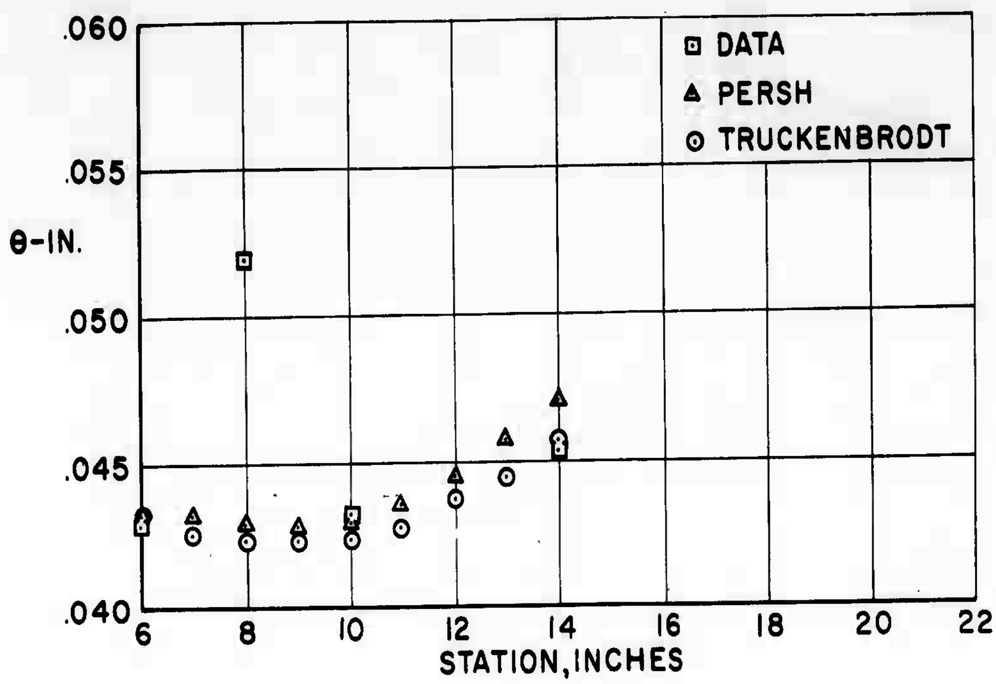


(k) Convex center section with a nearly adiabatic wall, $M_\infty = 4.50$.

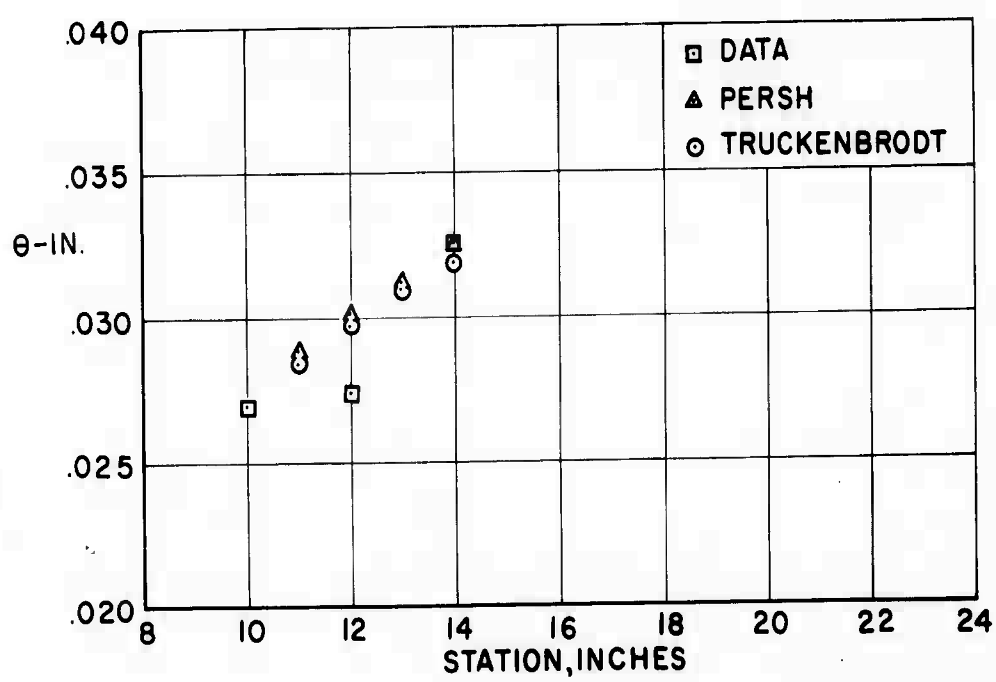


(l) Convex center section with a cooled wall, $M_\infty = 1.61$.

Figure 36.- Continued.

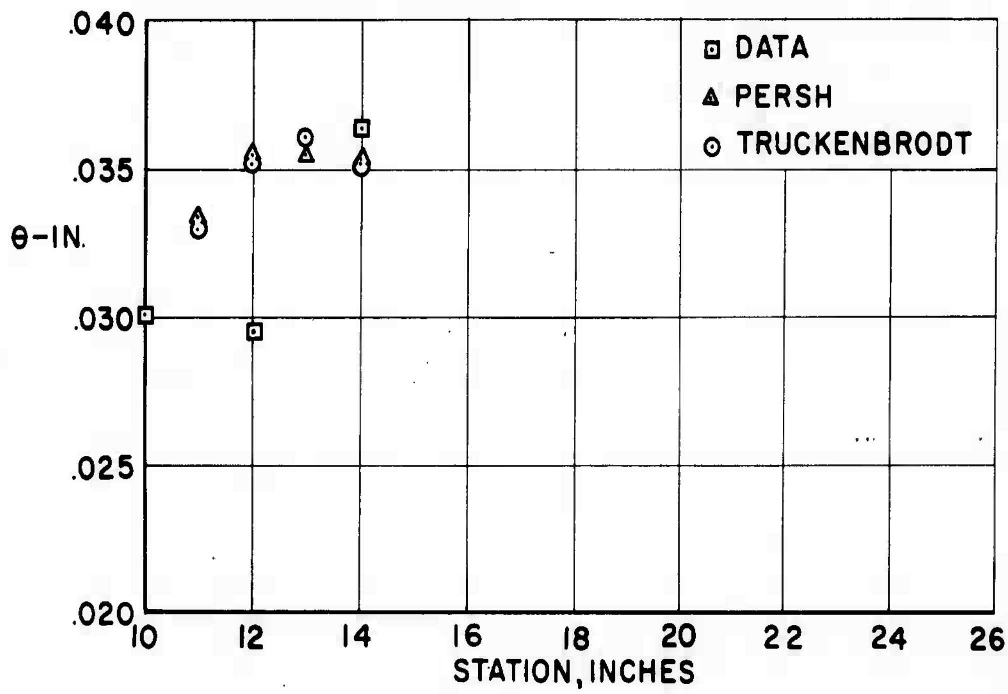


(m) Convex center section with a cooled wall, $M_\infty = 2.58$.



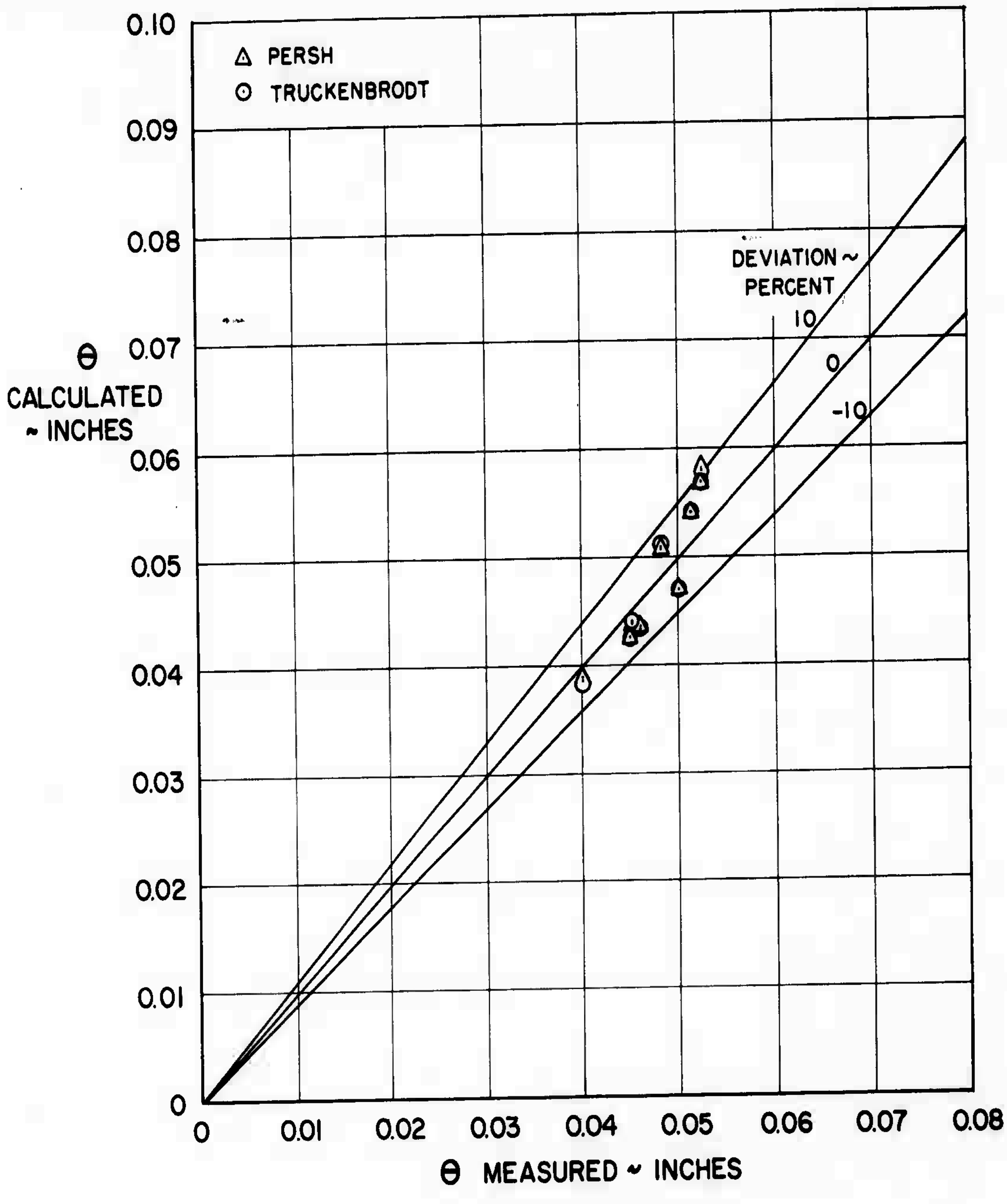
(n) Convex center section with a cooled wall, $M_\infty = 3.30$.

Figure 36.- Continued.



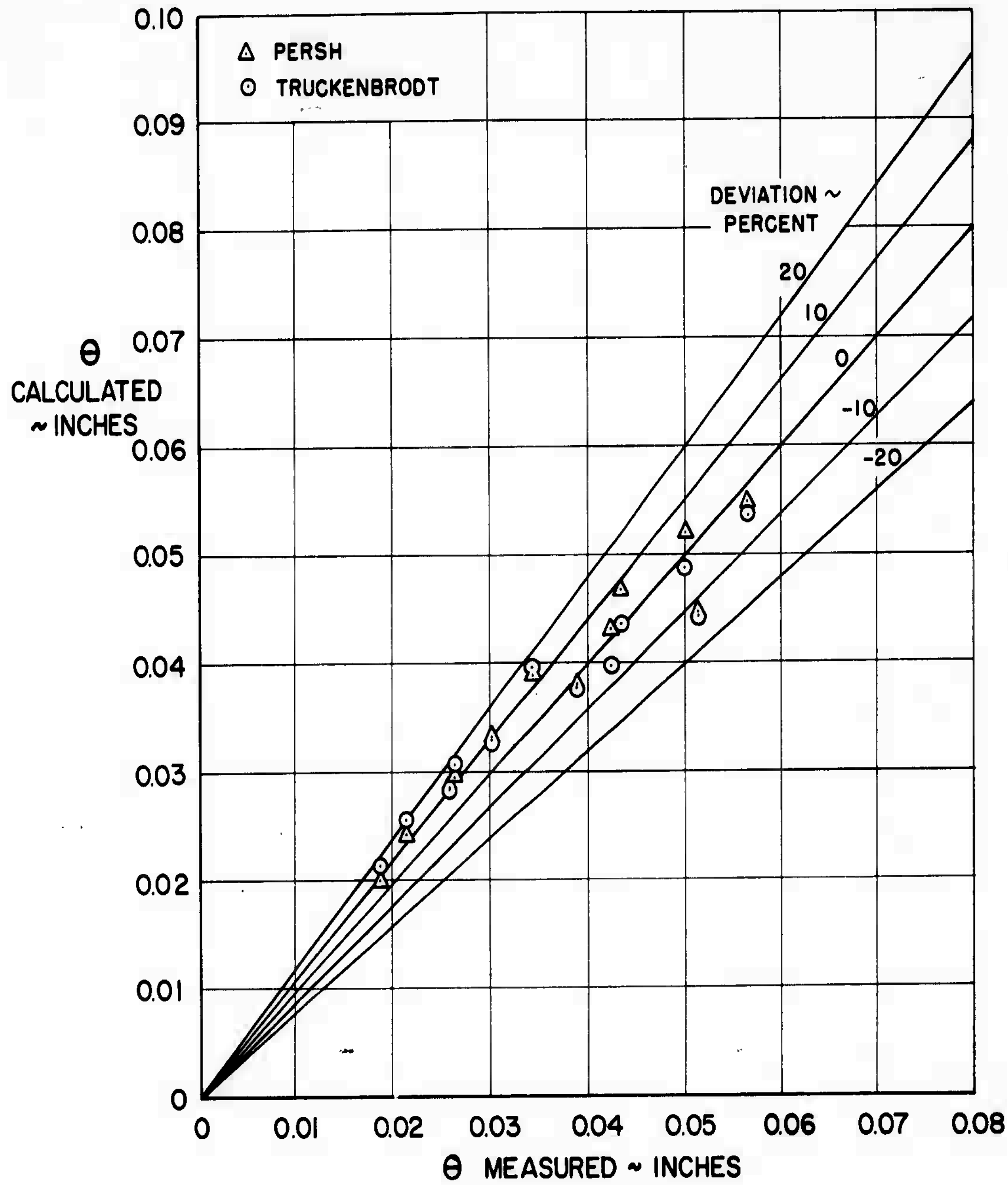
(o) Convex center section with a cooled wall, $M_\infty = 4.50$.

Figure 36.- Concluded.



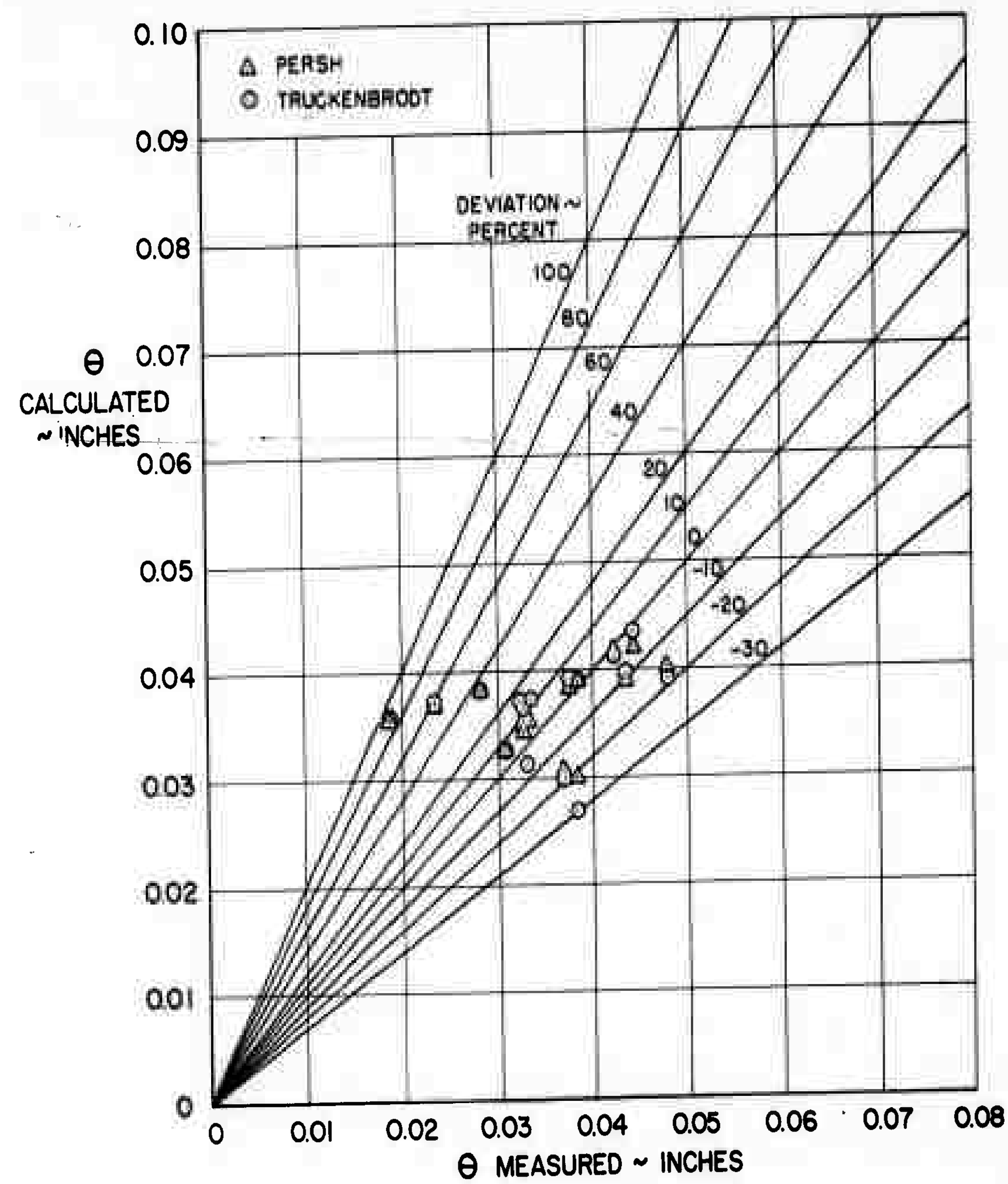
(a) Blunt center section.

Figure 37.- Correlation between the measured and the calculated momentum thicknesses.



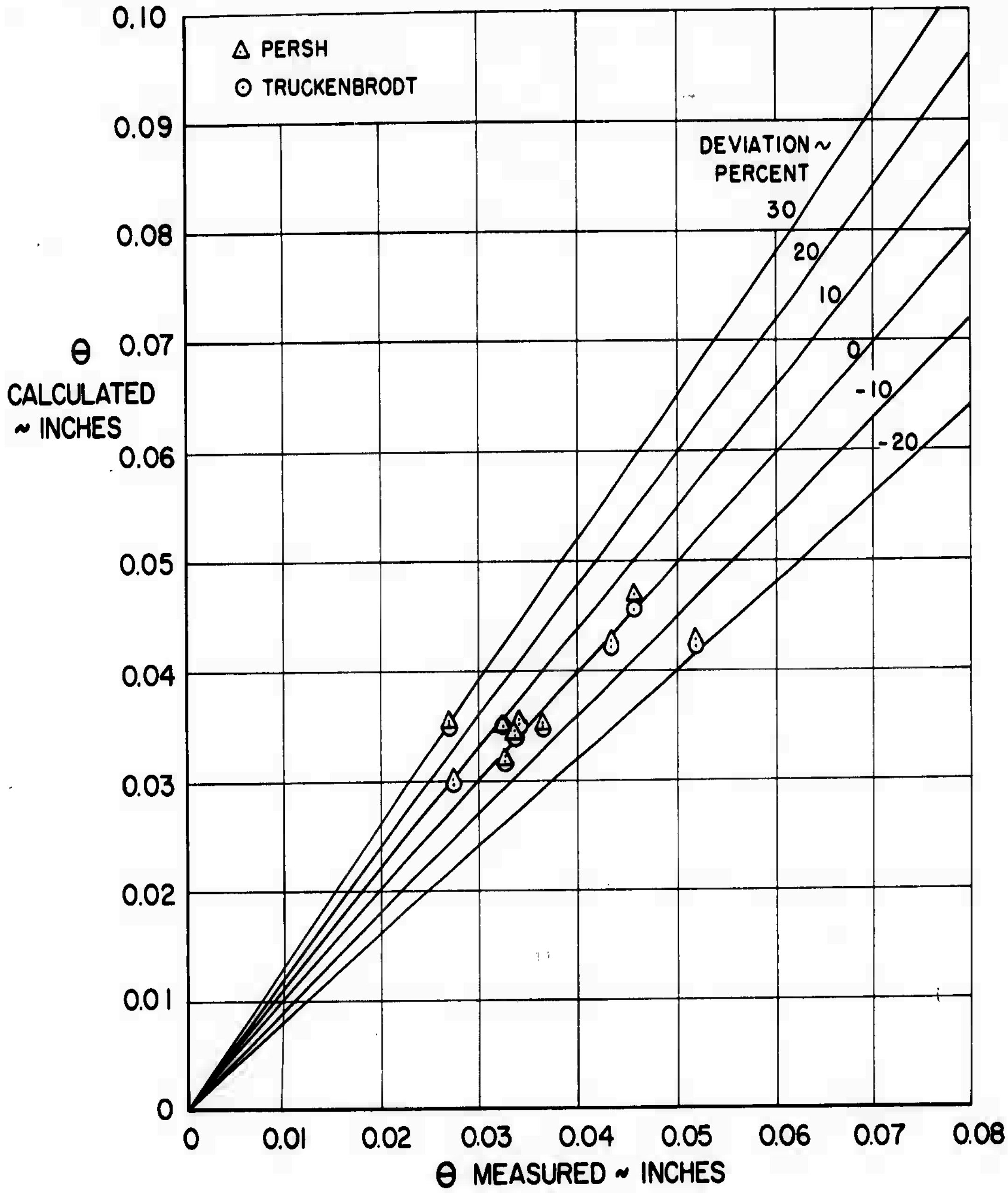
(b) Concave center section.

Figure 37.- Continued.



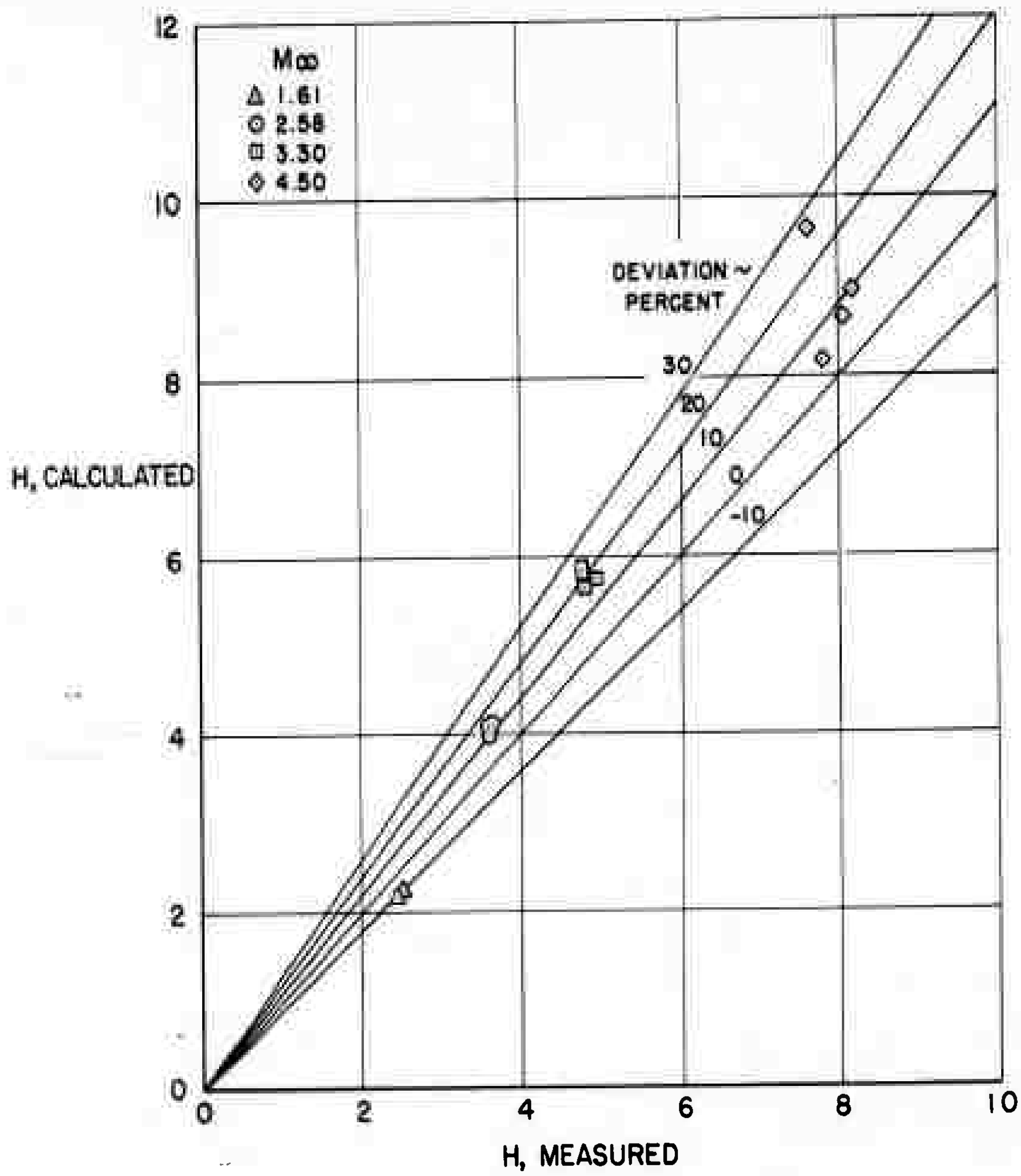
(c) Convex center section with a nearly adiabatic wall.

Figure 37.- Continued.



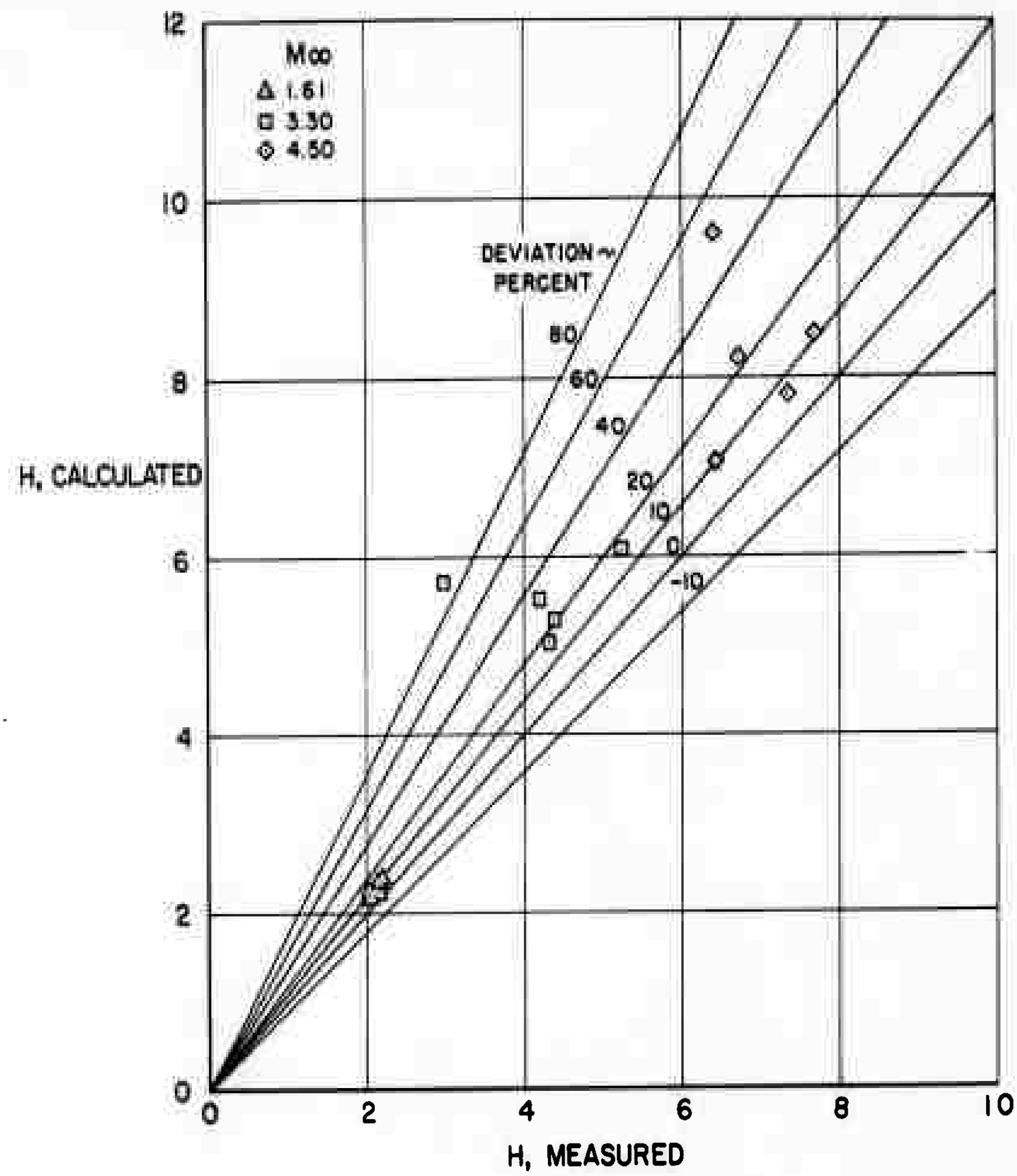
(d) Convex center section with a cooled wall.

Figure 37.- Concluded.



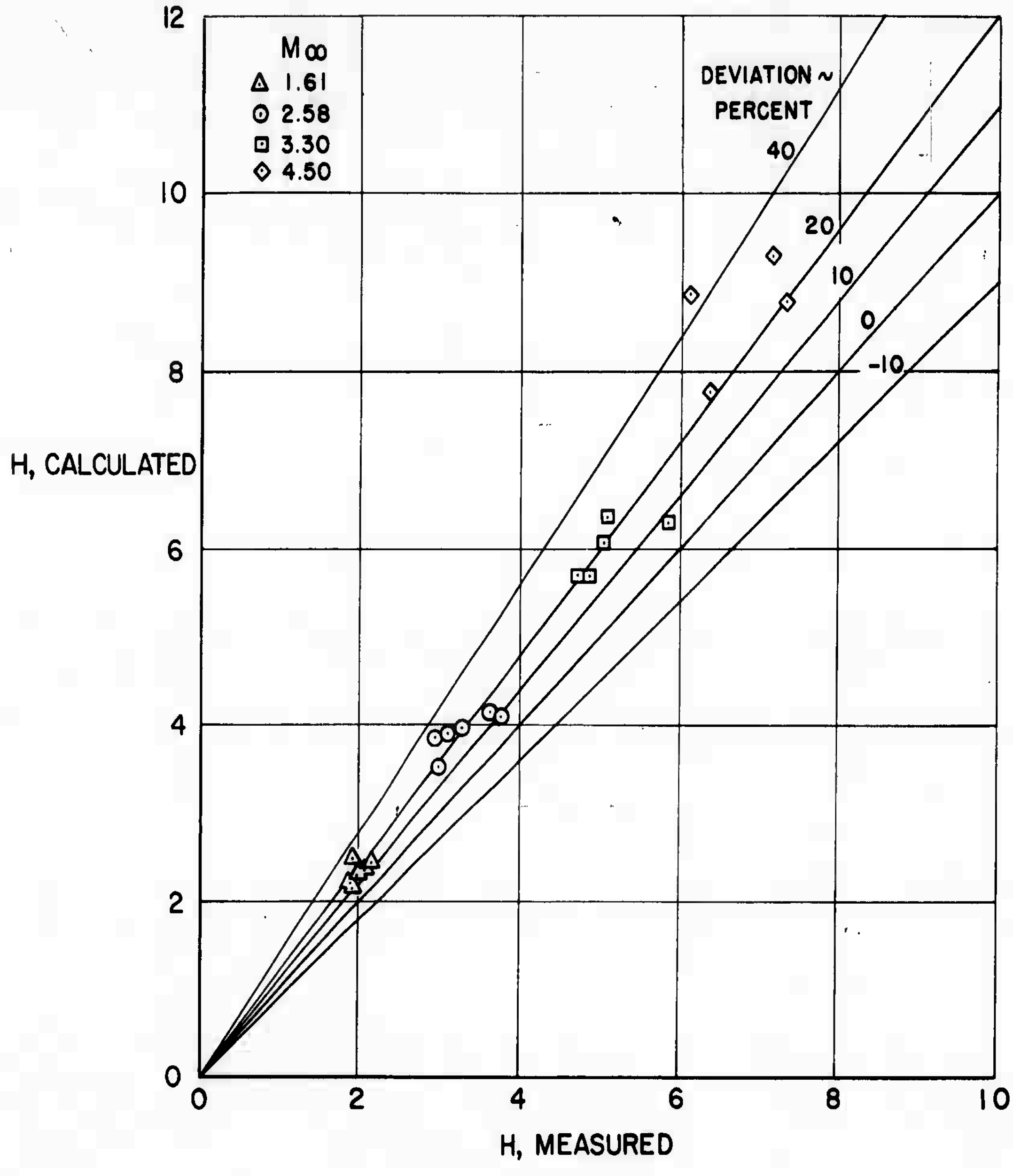
(a) Blunt center section.

Figure 38.- Correlation between the measured shape parameter and that calculated by the method of Persh.



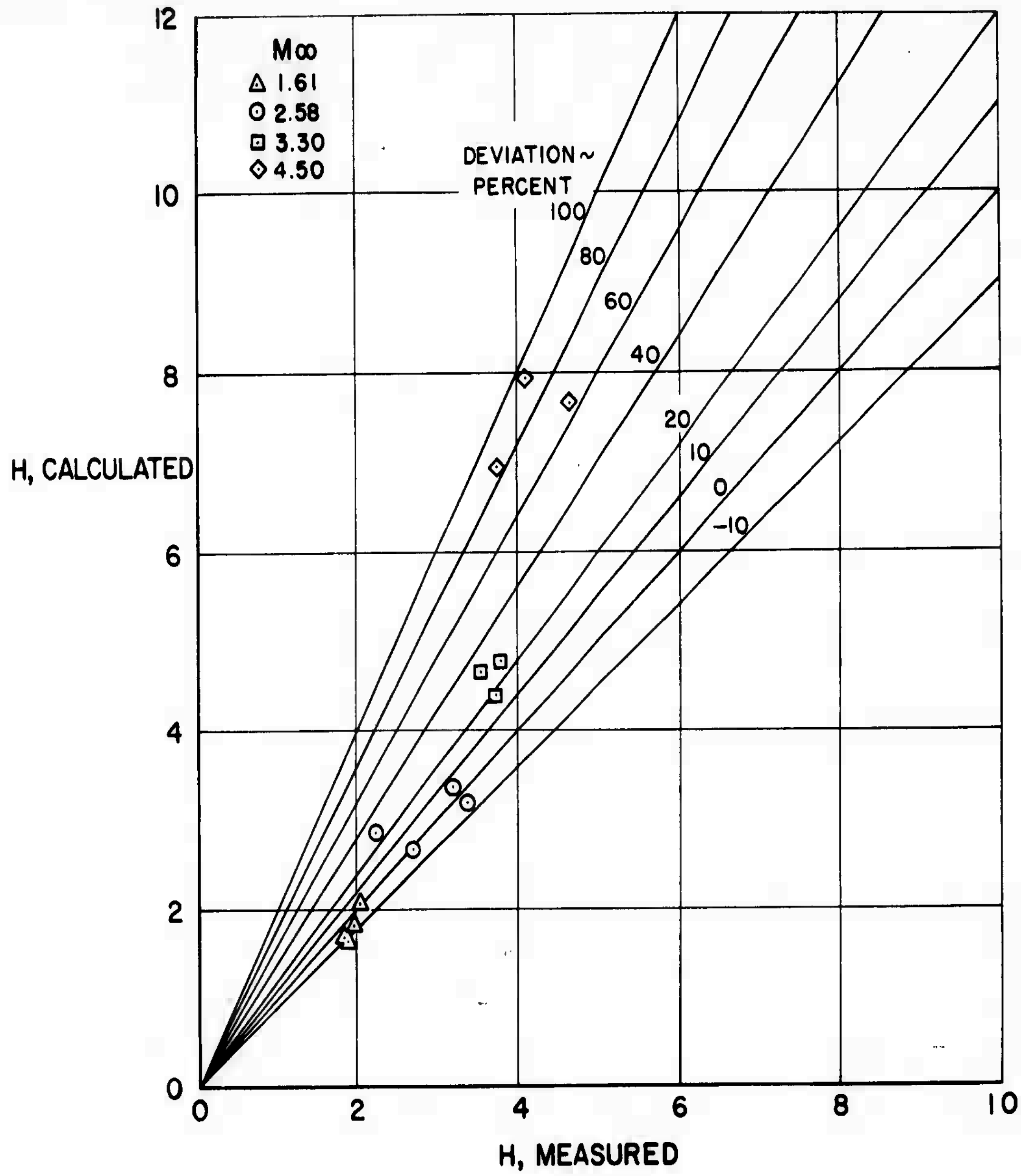
(b) Concave center section.

Figure 38.- Continued.



(c) Convex center section with a nearly adiabatic wall.

Figure 38.- Continued.



(d) Convex center section with a cooled wall.

Figure 38.- Concluded.

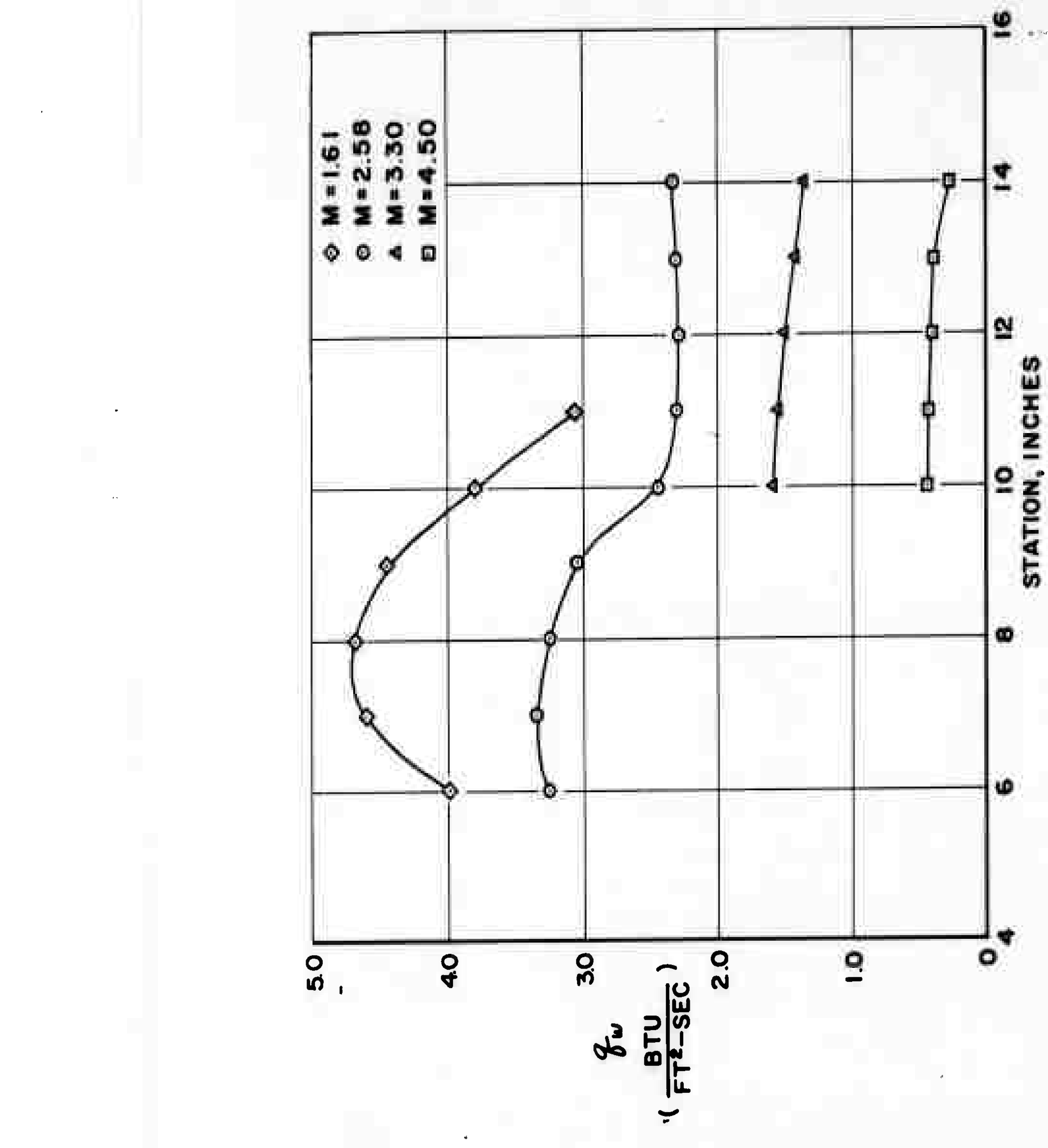
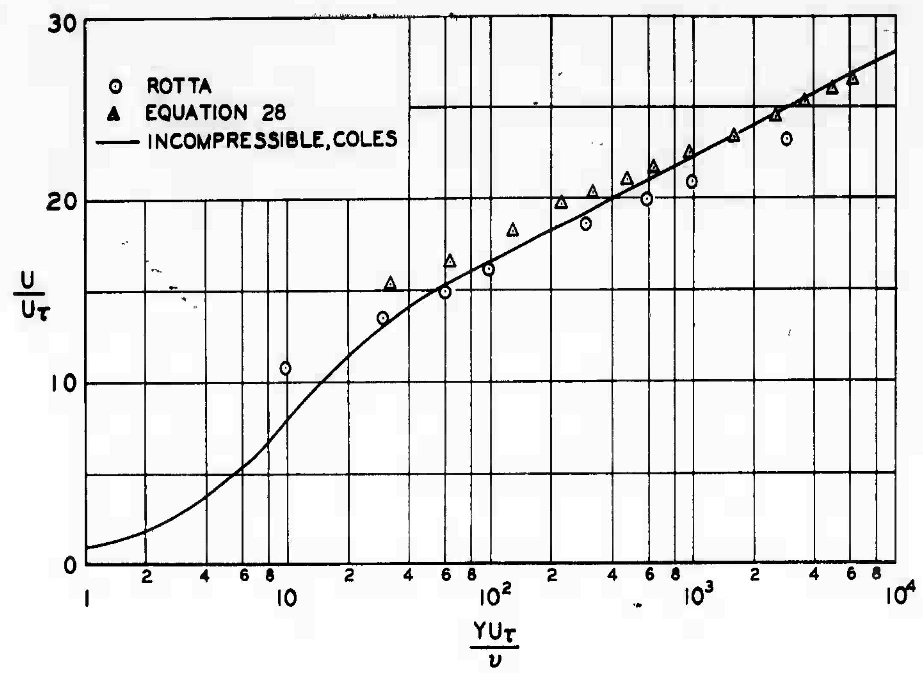
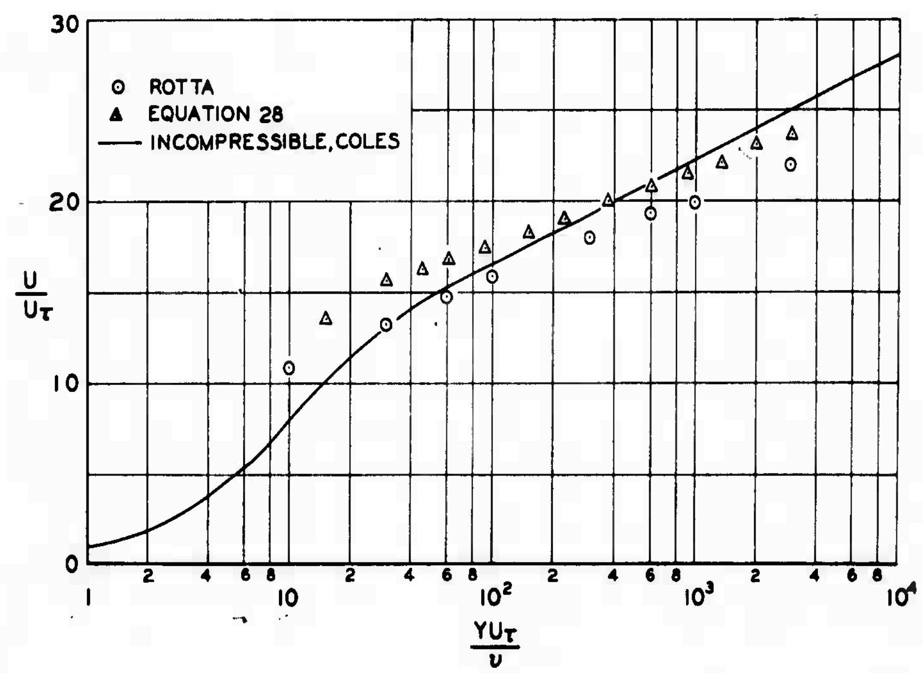


Figure 39.- Calculated heat flux for the convex center section with a cooled wall.

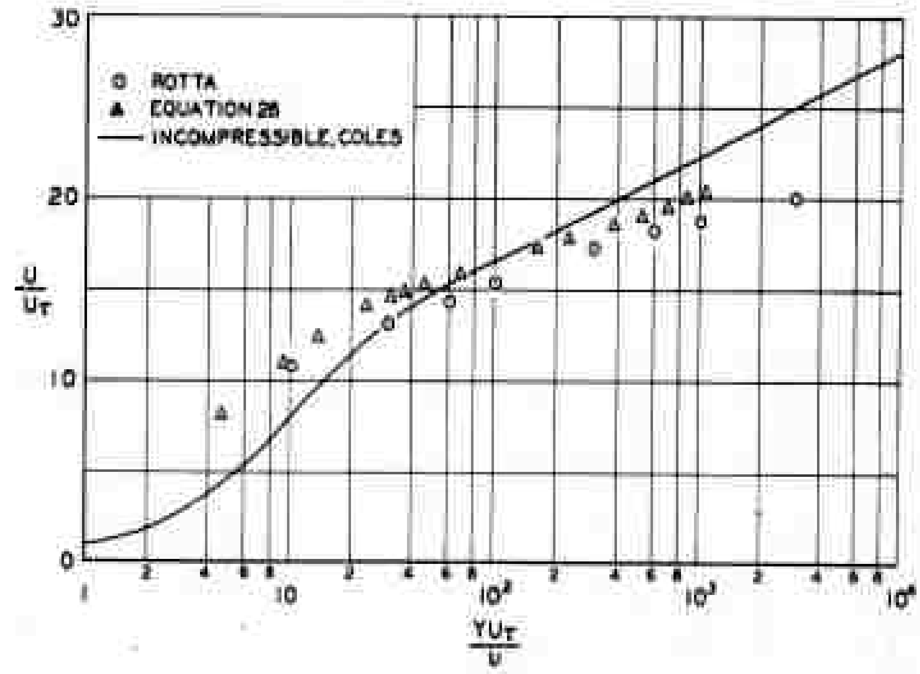


(a) $M_\infty = 2.58$, Station 12.



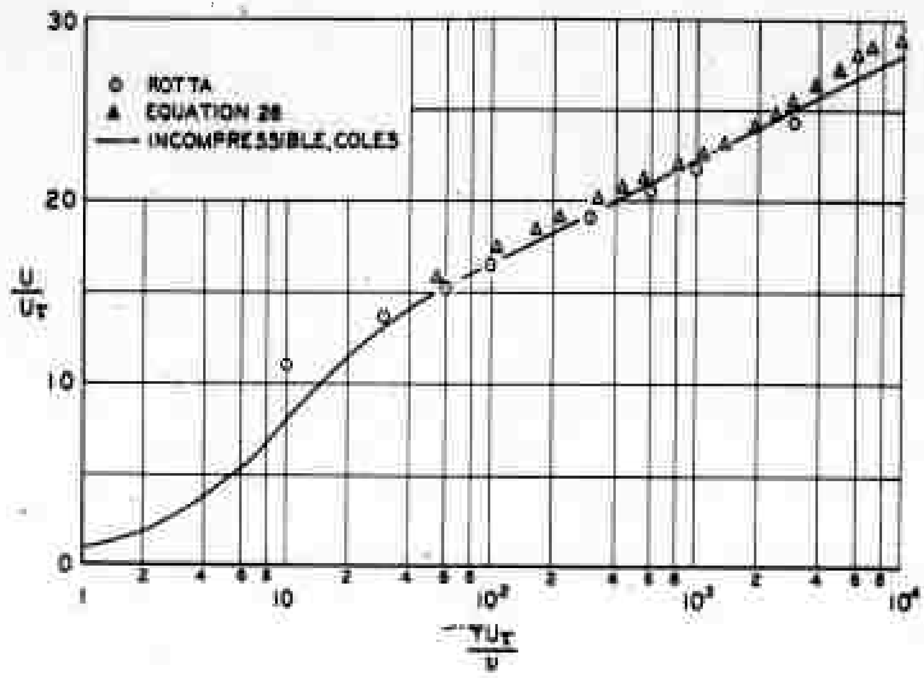
(b) $M_\infty = 3.30$, Station 12.

Figure 40.- Universal-type velocity profiles for the blunt center section.

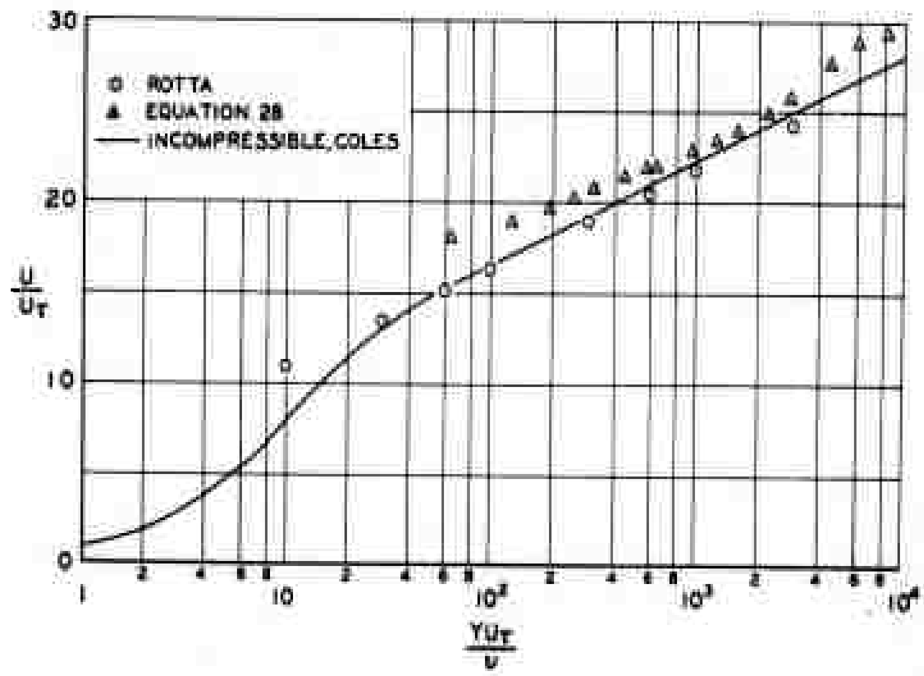


(c) $M_\infty = 4.50$, Station 12.

Figure 40.- Concluded.

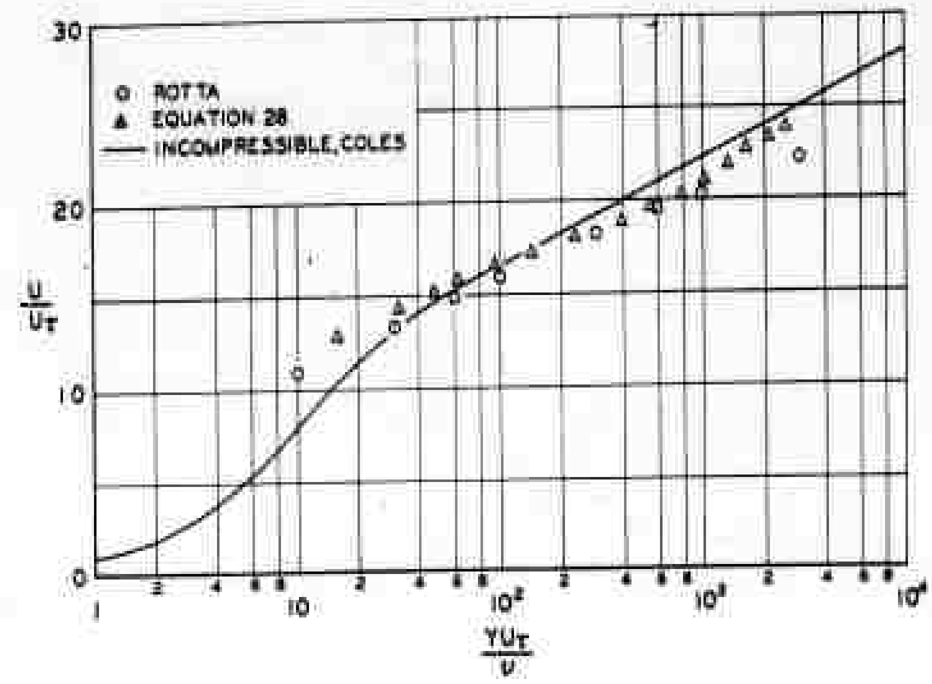


(a) $M_\infty = 1.61$, Station 0.

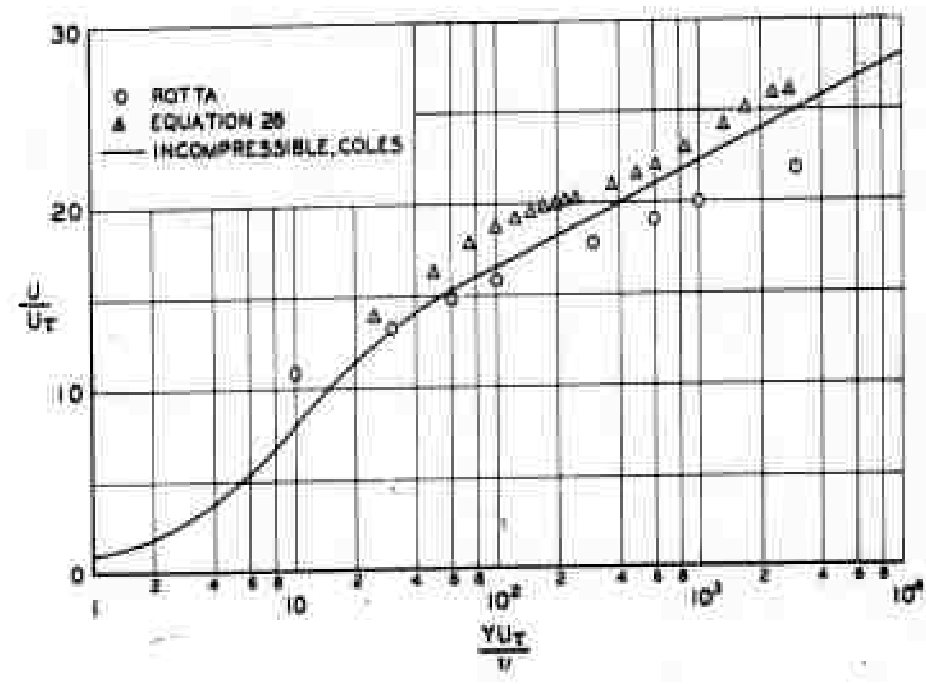


(b) $M_\infty = 1.61$, Station 8.

Figure 41.- Universal-type velocity profiles for the concave center section.

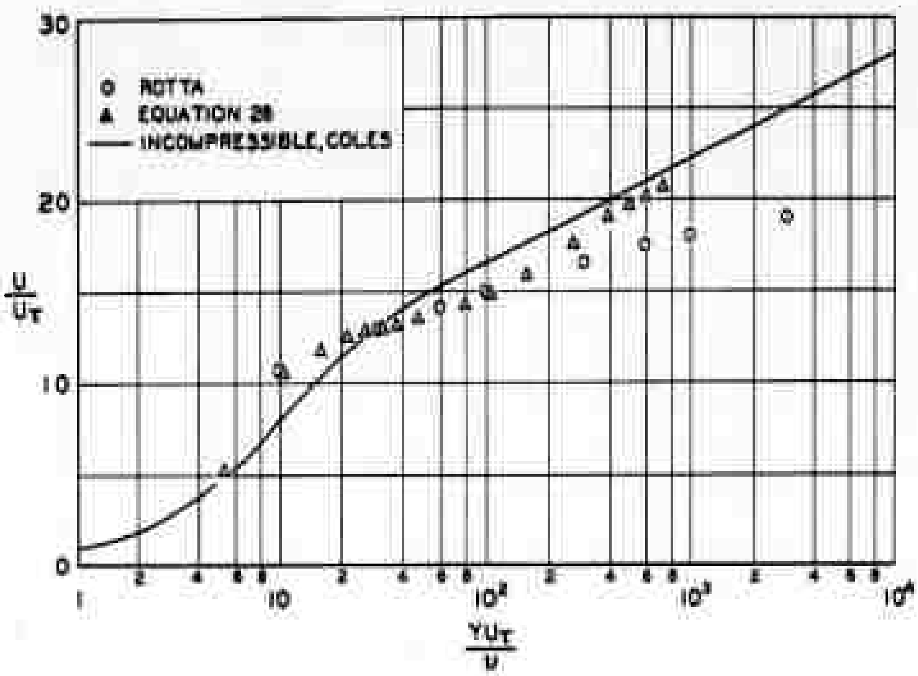


(c) $M_\infty = 3.30$, Station 0.

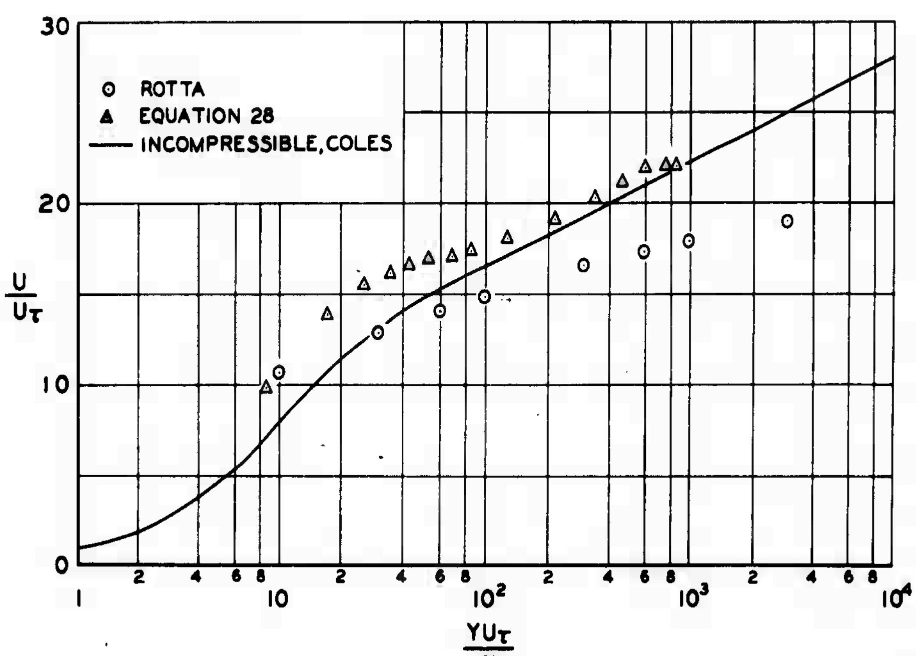


(d) $M_\infty = 3.30$, Station 8.

Figure 41.- Continued.

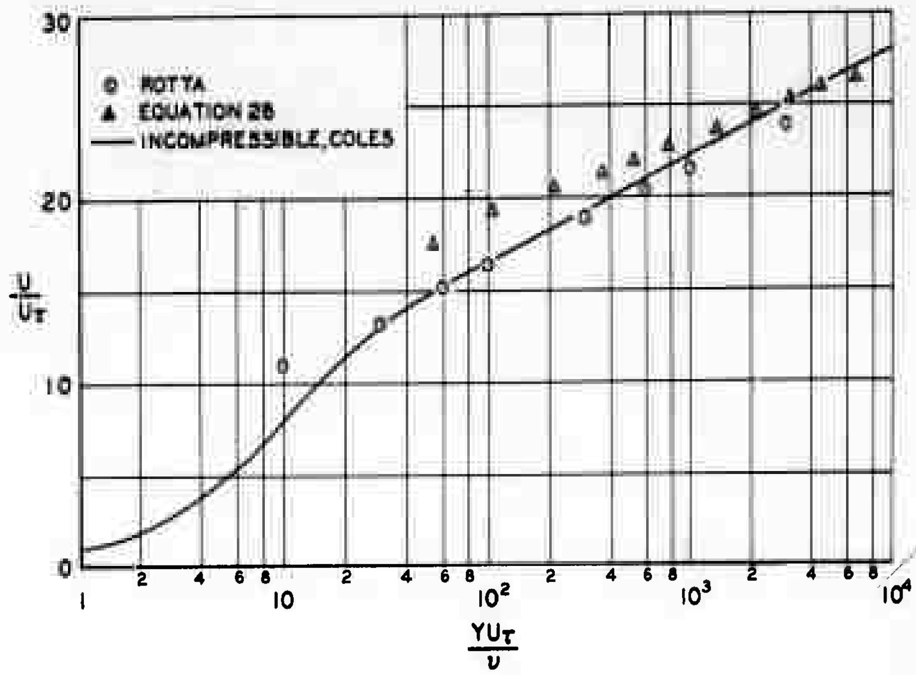


(e) $M_\infty = 4.50$, Station 0.

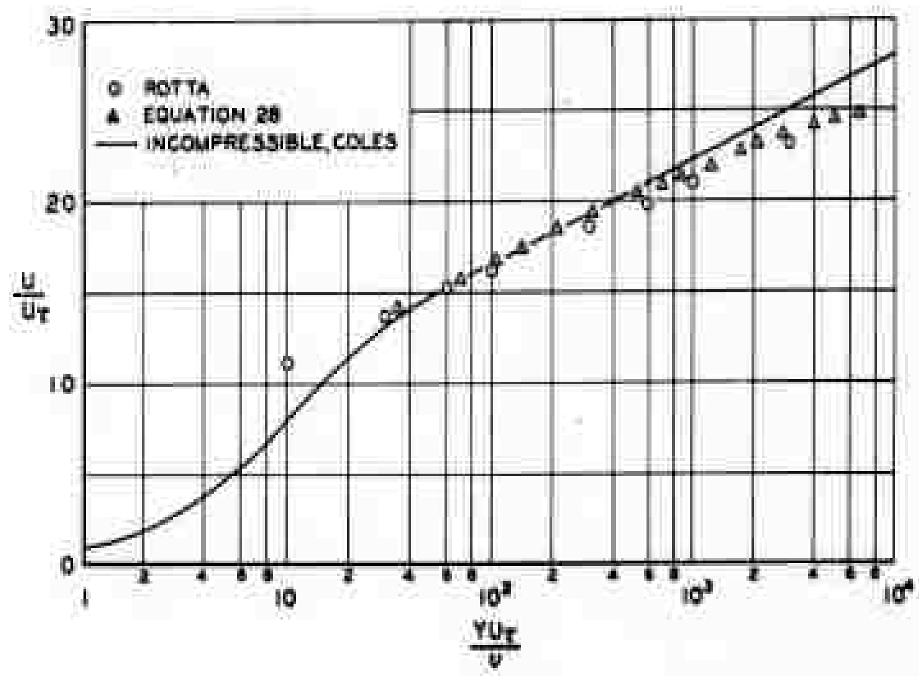


(f) $M_\infty = 4.50$, Station 8.

Figure 41.- Concluded.

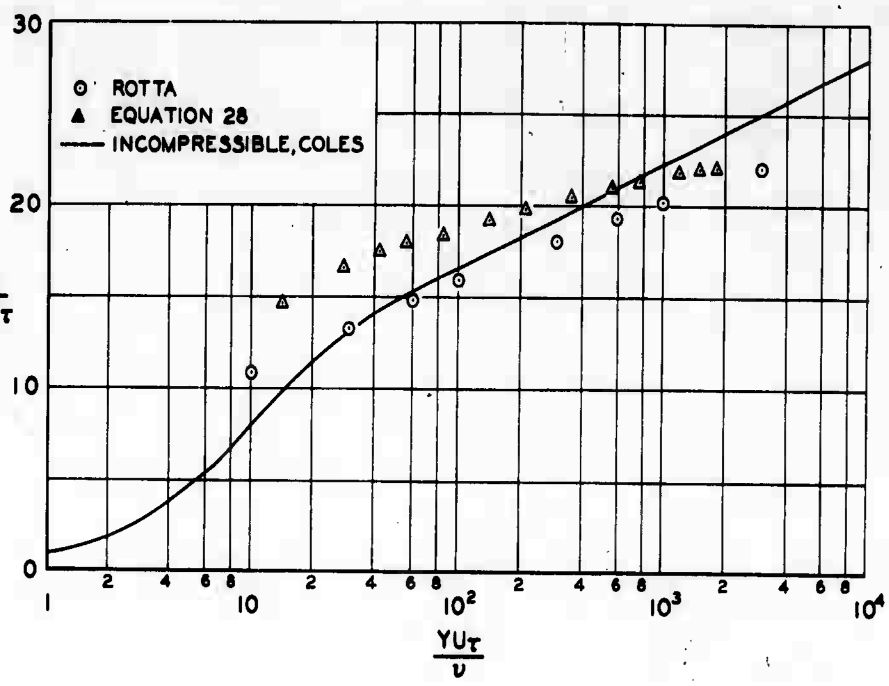


(a) $M_\infty = 1.61$, Station 12.

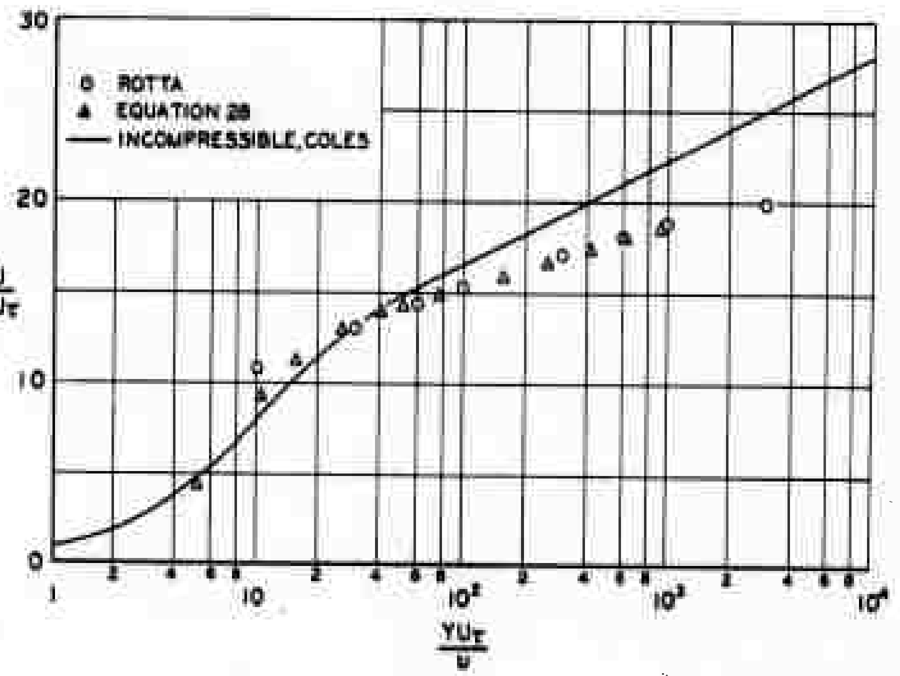


(b) $M_\infty = 2.58$, Station 8.

Figure 42.- Universal-type velocity profiles for the convex center section with a nearly adiabatic wall.

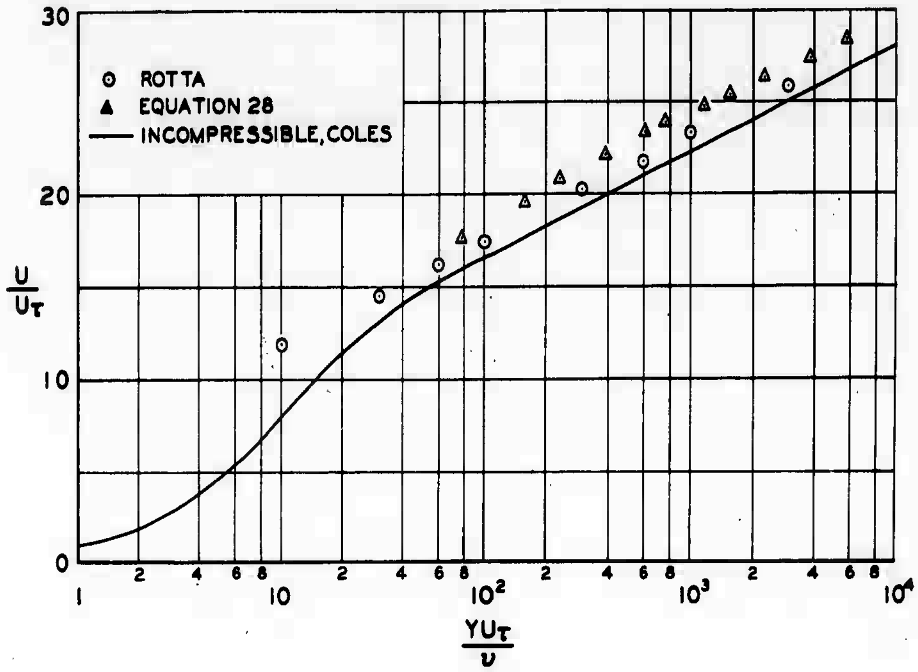


(c) $M_\infty = 3.30$, Station 12.

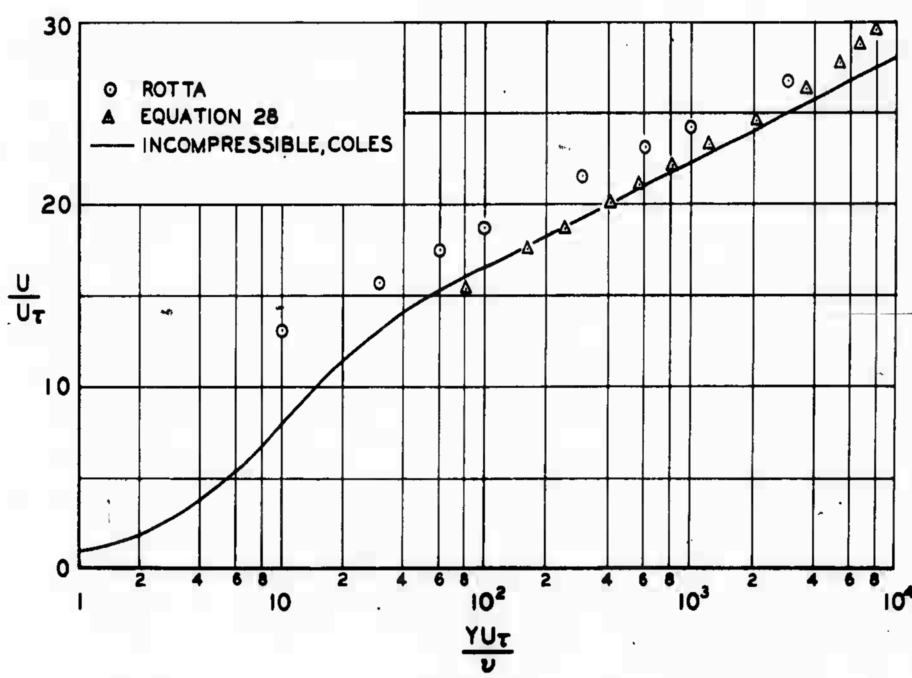


(d) $M_\infty = 4.50$, Station 12.

Figure 42.- Concluded.

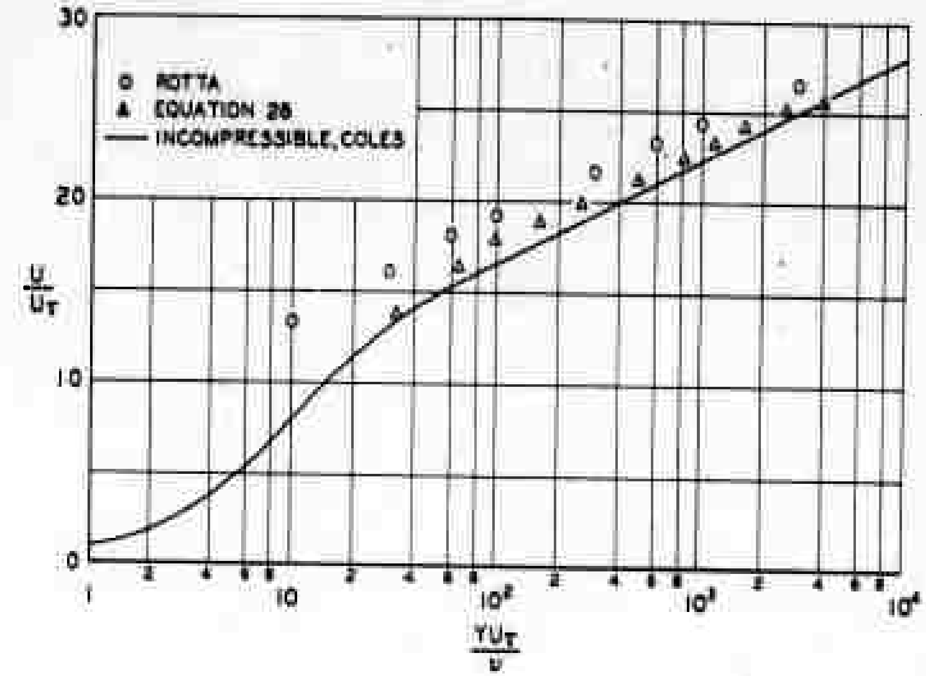


(a) $M_\infty = 1.61$, Station 12.

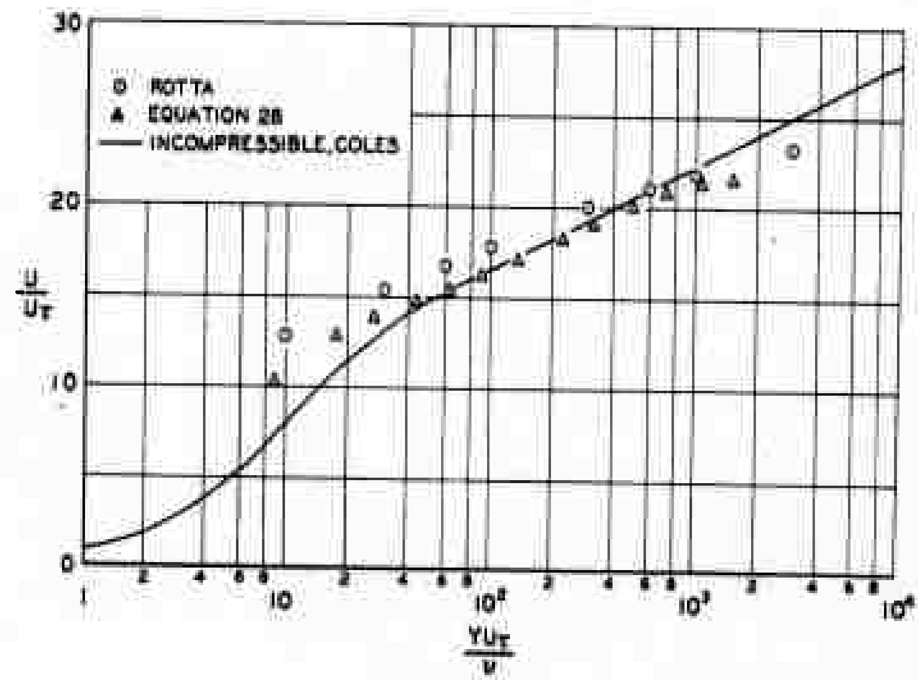


(b) $M_\infty = 2.58$, Station 8.

Figure 43.- Universal-type velocity profiles for the convex center section with a cooled wall.

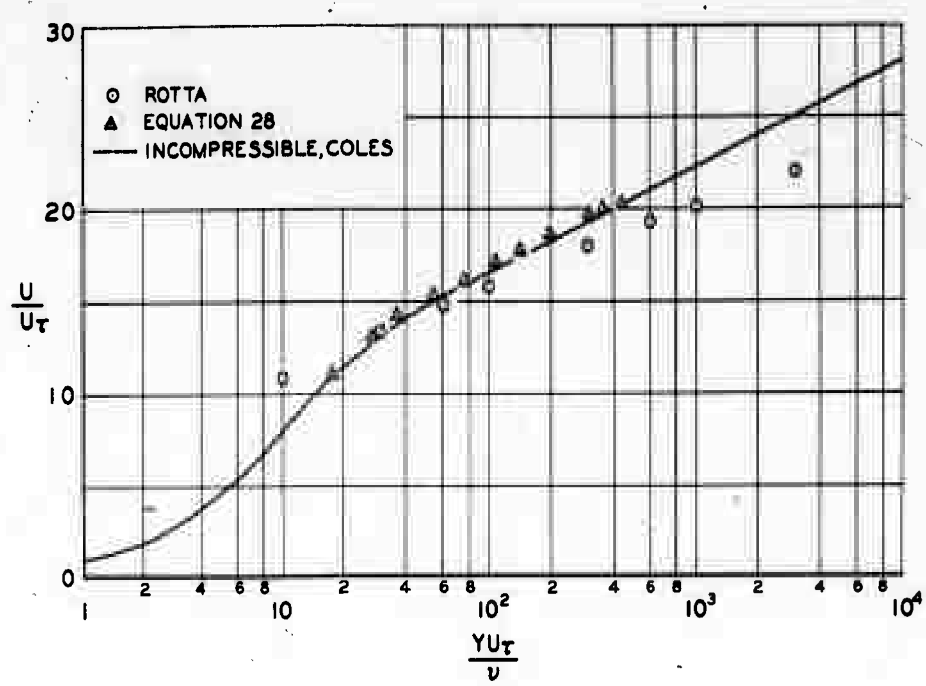


(c) $M_\infty \doteq 3.30$, Station 12.

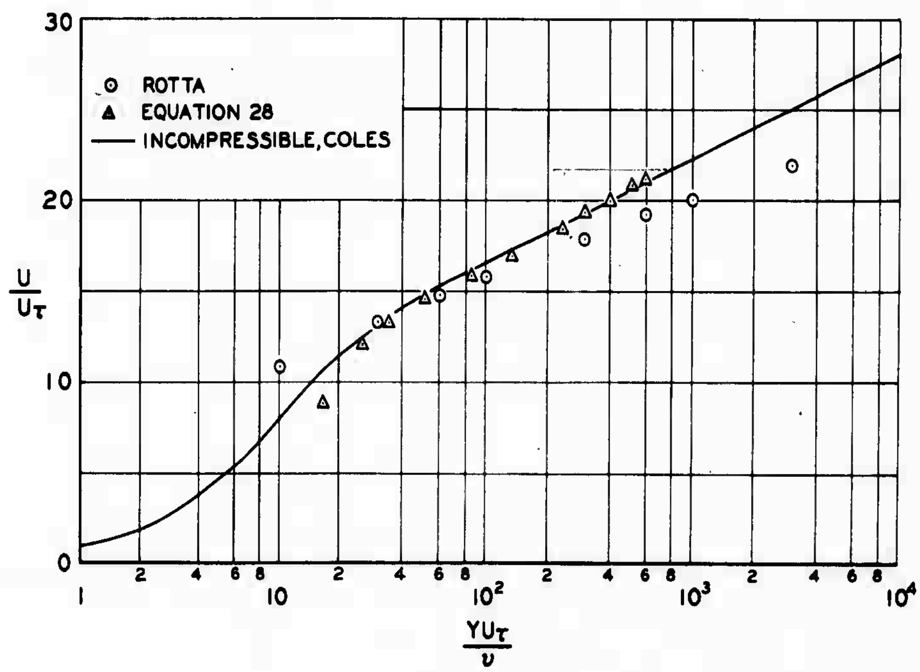


(d) $M_\infty = 4.50$, Station 12.

Figure 43.- Concluded.

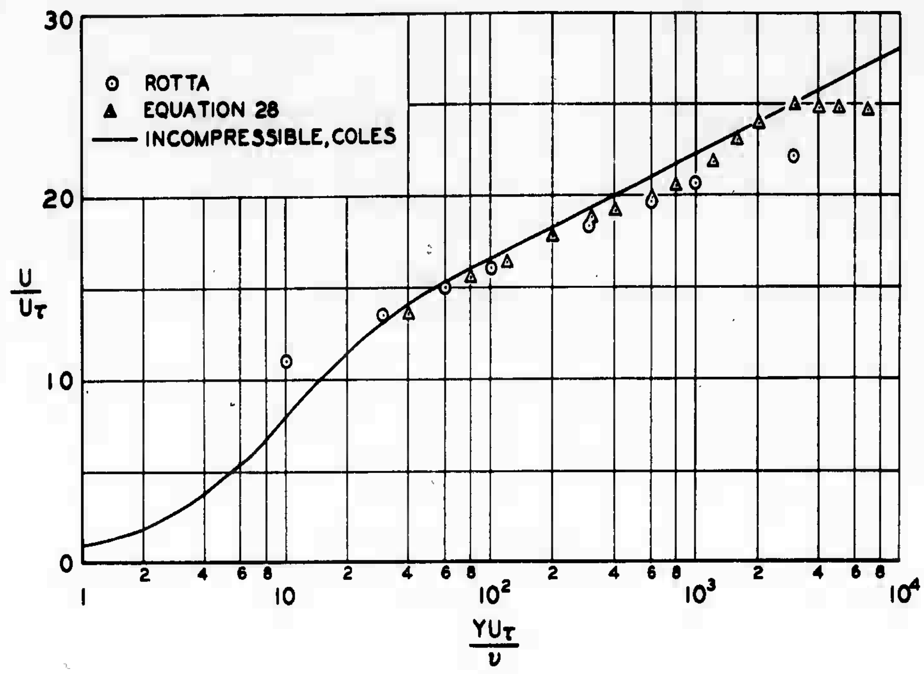


(a) M_∞ = 2.57, Station 150 mm.

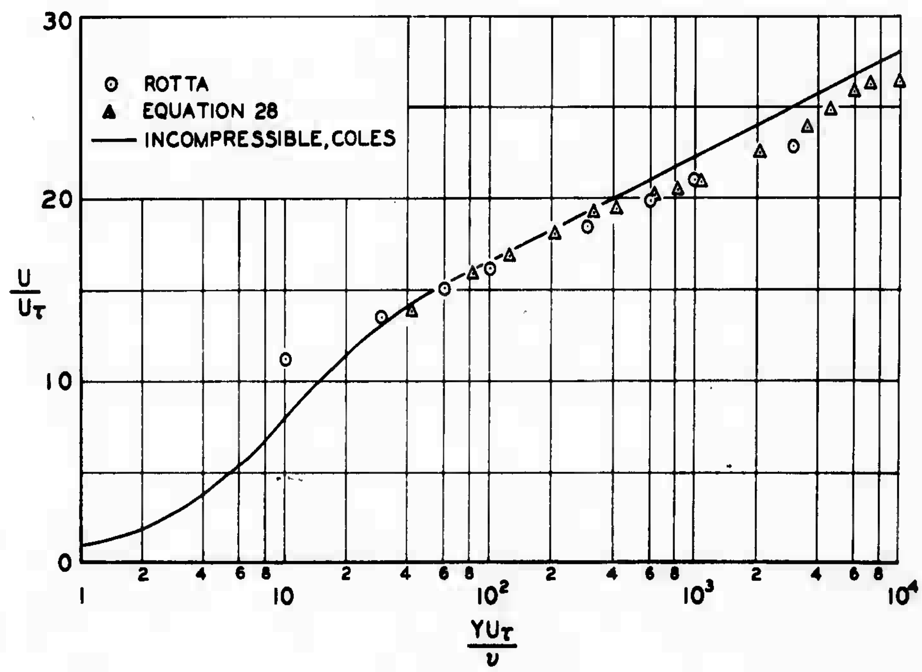


(b) M_∞ = 2.57, Station 348 mm.

Figure 44.- Universal-type velocity profiles for the data from reference 3.

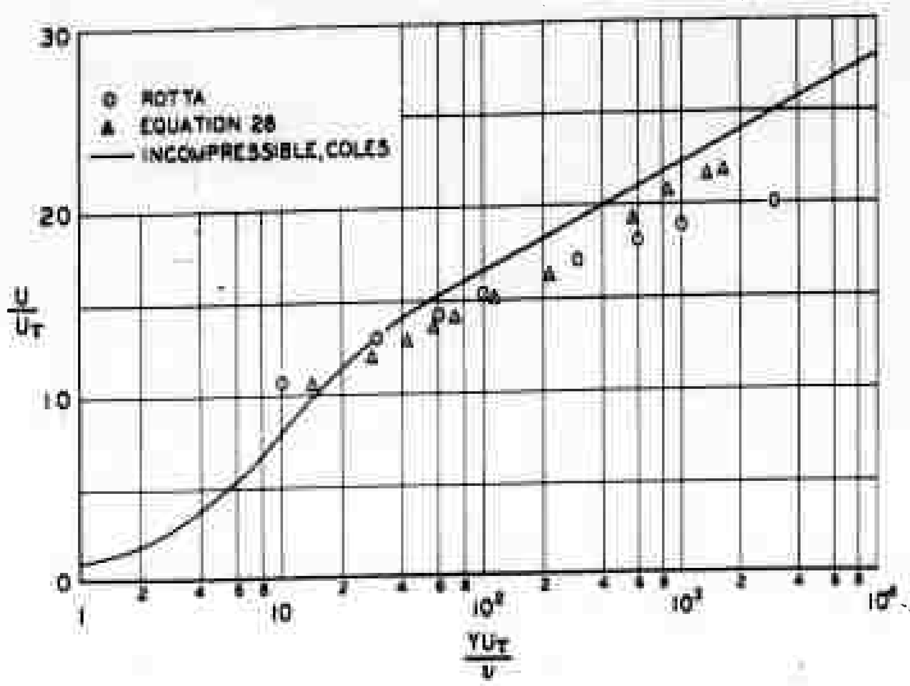


(a) $M_{\infty} = 2.98$, Station 37.5 inches.

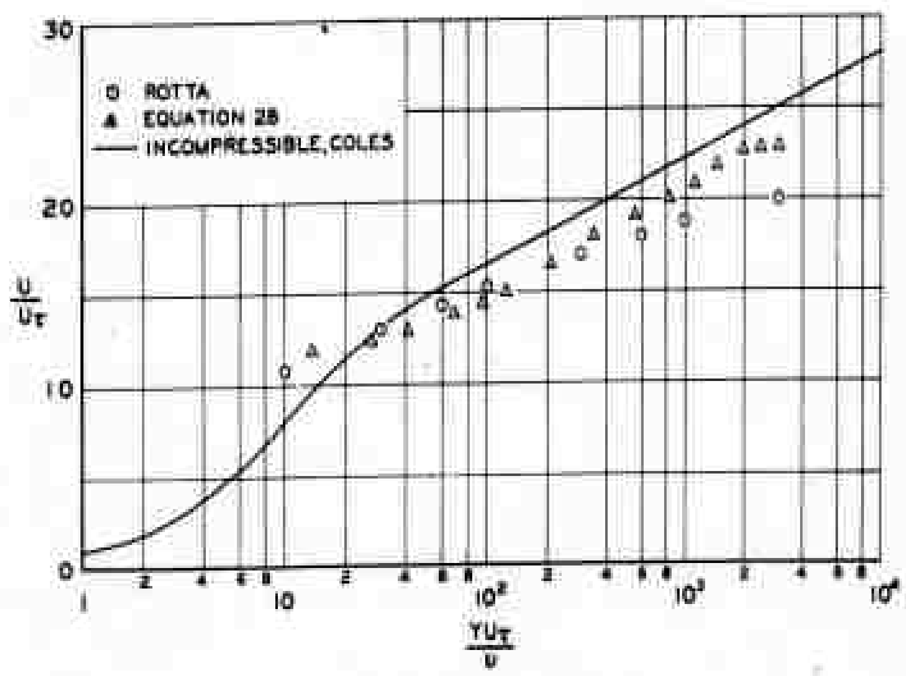


(b) $M_{\infty} = 2.98$, Station 91.5 inches.

Figure 45.- Universal-type velocity profiles for the data from reference 44.



(c) $M_\infty = 4.88$, Station 37.5 inches.



(d) $M_\infty = 4.88$, Station 91.5 inches.

Figure 45.- Concluded.